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ABSTRACT

The proposal describes a demonstration career education project designed to promote career education philosophy, methods, program activities, and evaluation procedures in designated local education agencies (LEAs). The project's title is Academic Enhancement Through Career Education (ACE). The proposal's first section contains the proposal itself and discusses its purpose, objective, scope, capabilities, and terms employed. Section two describes the operational plan with respect to the central coordination center, the LEA satellite centers, and the schedule of events. The third section examines the evaluation procedures for the project and discusses its exemplary nature. One-half of the document c funded projects completed by applicant, local education agency contributions, models for infusing career education in social studies and in mathematics, sample ACE unit, and support statement from the University-wide Career Education Committee of Colorado State University. (Author/JR)

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APPENDIX G

APPENDIX G

DISSEMINATION PROPOSAL

CE006888

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College of Professional Studies

Colorado State University

Fort Collins, Colorado 80523

TITLE OF PROJECT:	ACE Career Education Project: A project to communicate career education philosophy, methods, program activities and evaluation results to career education practitioners and to the general public in selected local education agencies.
PROJECT DIRECTOR:	Harry Huffman Department of Vocational Education Colorado State University Fort Collins, CO 80523 Telephone: (303) 491-5267
AMOUNT REQUESTED:	$204,729
STARTING DATE:	July 1, 1975
DURATION OF PROJECT:	12 months

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Criteria Guide for Application Review

The Office of Education's proposed funding criteria for Career Education programs are shown below, and the pages of this proposal which relate to each criterion are indicated.

Criteria	Location in Proposal
(1) Evidence of Need	3
(2) Objectives	1, 2
(3) Operational Plan	16-60
(4) Evaluation Plan	62-74
(5) Exemplary Nature of Project	75
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I. THE PROPOSAL

Purpose

This proposal is an offer to communicate, through a demonstration mode in designated local education agencies (LEA), career education philosophy, methods, program activities, and evaluation procedures to career education practitioners and to the general public. This project will hereafter be referred to as the ACE[1] Project. The participating local educational agencies and universities that will cooperate in this effort are shown below.

PARTICIPANTS

LEA Demonstration Site	Coordinator	Cooperating University
Detroit Public Schools (MI)	Dr. William Hoth Ms. Celestine Mongo	Wayne State University
Fremont Unified School District (CA)	Mr. Jim Mayo	University of California at Hayward
Fulton County School System (GA)	Dr. Clyde Welter	Georgia State University
School District No. 70 (CO) Sidney Public Schools (NE)	Dr. Harry Huffman	Colorado State University
Plainfield (NJ)	Dr. Annell Simcoe	Rutgers University
San Diego Unified School District (CA)	Dr. Ronald Detrick	California State College at Long Beach University of California at San Diego

Project Objectives

The major objectives of the project are:

1) to demonstrate an operational CE model (known as the ACE model) for LEA use and for exemplary purposes.

2) to test the potential of the model for making incremental changes in CE programs in school districts throughout the nation.

Each objective is expanded upon on the next page.

---

[1] Academic enhancement through Career Education.

Objectives Expanded

Objective 1: To demonstrate an operational CE model (known as the ACE model) for LEA use and for exemplary purposes. The ACE model provides:

a. specific guidelines, strategies, and materials for orienting citizens, teachers, and administrators to solve the problems encountered by all local educational agencies attempting to introduce a total career education program.

b. a transportable system for identifying and clarifying LEA career education objectives.

c. the LEA with a means of identifying careers to be explored and sequencing career activities through a master career education curriculum plan.

d. academic enhancement by reinforcing and giving relevance to subject matter skills and knowledges through a fusion method[1].

e. guidelines for in-service education for teachers and staff members and reinforcement for teachers, since all participating teachers have the opportunity to earn college, university, or district credit for developing occupational simulation units in workshops or courses held at the school site.

f. cooperative efforts between LEA's and local colleges and universities.

g. guidelines for implementing a comprehensive evaluation plan for local use.

Objective 2: To test the potential of the ACE model for making incremental changes in CE programs in school districts throughout the nation. The test will deliver hard data on the effectiveness of the operational model in making incremental changes in:

a. school districts already heavily involved in CE programs.

b. a variety of socio-economic and demographic settings.

---

[1] A true fusion unit merely reinforces what the teacher is already doing; it is simply a *new way* of presenting and developing subject matter skills and knowledges. The teacher substitutes fusion units for presently used reinforcement exercises and, therefore, does not reduce the amount of time or emphasis placed on subject matter. In other words, the teacher increases the relevancy of what is being taught by showing career applications of the skills and knowledges taught. A sample fusion unit is shown in Appendix B.

Product

The product of this project will be a tested operational model for communicating CE philosophy, methods, program activities, and evaluation results to LEA administrators, school staff, and community leaders.

Evidence of Need

Nationally, LEA's with on-going career education programs, including the LEA's participating in the proposed project, have the following needs in varying degrees:

Communication and Involvement with Community

1) Need for LEA to communicate with and to involve the entire community in decisions concerning the objectives and outcomes of CE. This is highlighted by the following condition calling for educational reform: "The general public, including parents and the business-industry-labor community, has not been given an adequate role in formulation of educational policy."[1] The open communications system in the ACE model meets this need.

Transportable Operational Model

2) Need for an operational CE model which can be utilized by any LEA to meet local objectives. "An in-service teaching program should be based on the educational need of the learners in the school district, the needs of the working communities surrounding these schools, and the creative endeavor of teachers, counselors, and administrators working together to initiate a program."[2]

---

[1] *An Introduction to Career Education*, a policy paper of the U.S. Office of Education (U.S. Department of Health, Education, and Welfare, 1975), p. 2.

[2] Kenneth B. Hoyt, et al., *Career Education and the Elementary School Teacher* (Salt Lake City: Olympus Publishing Company, 1973), p. 155.

Generally, no "set" or pre-determined plan will work for or be accepted by all school districts. However, the ACE model is unique because it utilizes local objectives as a point of departure and is therefore transportable from one LEA to another.

Planning and Sequencing Career Activities

3) Need for planning, sequencing, and systematizing career activities and efforts. "If career education is seen as a developmental process, then it is important to plan for it in a developmental fashion."[1] This would prevent excessive repetition of, or gaps in, career information presented in grades K-12. This need is supported by information that school systems which have had CE programs for two or more years are now facing student complaints of excessive repetition of information about certain careers, and lack of information about others. The ACE model provides a design for sequencing career activities through a master CE curriculum plan.

Academic Enhancement by Increasing Relevancy Through Career Education

4) Need for academic enhancement by increasing the relevancy of academic studies through CE. The need for this is supported by the following programmatic assumptions of CE: "If students see relationships between what they are being asked to learn in school and the world of work, they will be motivated to learn more in school. . .
Relationships between education and work can be made more

---

[1] Norman C. Gysbers, Wilbur Miller, and Earl J. Moore, Developing Careers in the Elementary School, (Columbus: Charles E. Merrill Publishing Company, 1973), p. 25.

meaningful through infusion into subject matter than if taught as a separate body of knowledge."[1] One of the weaknesses of many CE programs is that teachers see the CE activities as "add-ons" which have little or no relevance to the subjects they are teaching. In following the ACE model, teachers are taught to develop career simulation units[2] which will increase the relevancy of the specific knowledge and skills they are presently teaching.

Staff Development Through Cooperative Efforts of LEA and Higher Education

5) Need for staff development of LEA's and local colleges and universities through cooperative efforts. The following statement supports this need: "The limiting factor now in in-service programs for CE is a shortage of university personnel who are qualified to offer such instruction in CE.... In more desirable situations, local school personnel are working together with university instructors to the long-term advantage of both.... The principal advantage to the public school personnel is less frequent rediscovery of the wheel because the peripatetic university professor brings with him word of the trials, successes and failures of

---

[1] An Introduction to Career Education, a policy paper of the U.S. Office of Education (U.S. Department of Health, Education, and Welfare, 1975), p. 5, 7.

[2] Career simulation units are presently being used by teachers in several sites nationally. These units which were developed in the Business and Office Career Education Curriculum Project, primarily depict business and office careers. However, under the ACE Career Education Model, simulations would depict a variety of careers in all occupational clusters.

other CE programs encountered in his or her experiences with those programs."[1] LEA's often need assistance from people who, through experience, have expertise in programmatic career education planning and who can help increase the CE capabilities of the school faculty. The cooperative effort between LEA's and local colleges and universities is inherent in the basic design of the ACE project.

Hard Evaluative Data

6) Need for hard data on incremental changes. "Once decisions have been made about program objectives and outcomes, the appropriate processes must be selected to assure the achievement of the program outcomes. Provisions also must be made for the continual collection of outcome evaluation data since this data will provide feedback about the effectiveness of the objectives, processes, and outcomes..."[2] There is an absence of hard evaluative data to support CE programs. Such data is essential to pragmatically justify educational programs for which large amounts of public monies are allocated. Data should be derived from a variety of socioeconomic and demographic settings to most effectively benefit the public. The ACE project will operate in a variety of settings and will collect hard data on incremental changes at these locations.

---

[1] Rupert N. Evans and Wayne N. Lockwood, Jr., "Teacher Ed for Career Ed: Issues in Need of Solutions," Journal of Career Education, Vol. 1, No. 2, (Fall, 1974), p. 19.

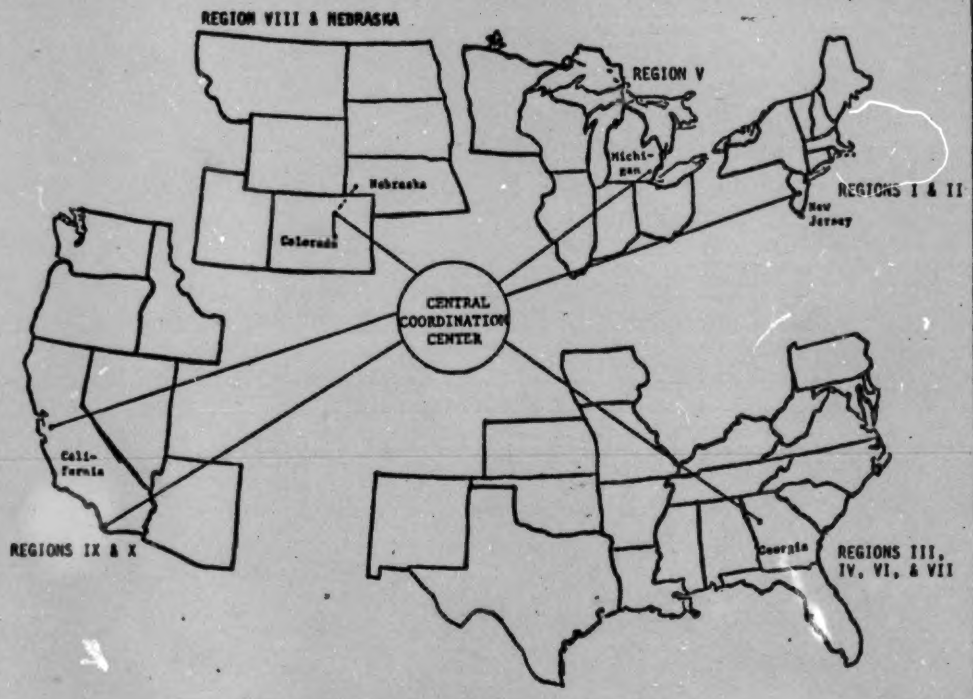
[2] Norman C. Gysbers, Wilbur Miller, and Earl J. Moore, Developing Careers in the Elementary School, (Columbus: Charles E. Merrill Publishing Company, 1973), p. 11.

Scope of the ACE Project

The scope of the ACE Project in terms of geographic coverage, local group involvement, and assistance to be given to local educational agencies is described in this section.

Scope in Terms of Geographical Coverage

LEA Satellite Centers, representing a variety of socio-economic and demographic settings, will be established in regions as illustrated below:

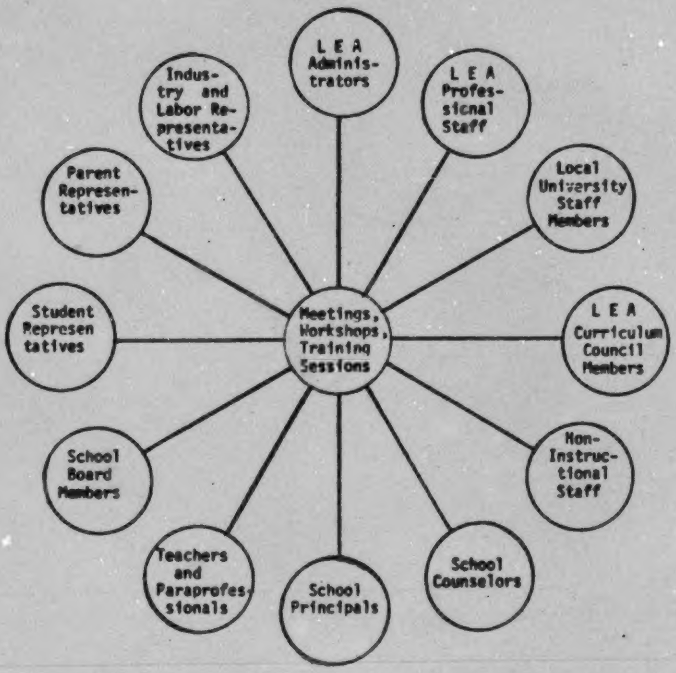


LEA SATELLITE CENTER LOCATIONS

Staff members of the Satellite Centers, located in *New Jersey, Georgia, California (2), Colorado, and Michigan,* will assist selected local educational agencies to plan and implement career education programs tailored to local needs and objectives. The Project Director, located at the ACE Project Central Coordination Center on the Colorado State University campus, will coordinate the activities of the Satellite Centers.

Scope in Terms of Local Group Involvement

The scope of the Project in terms of local group involvement is shown graphically in the illustration below:

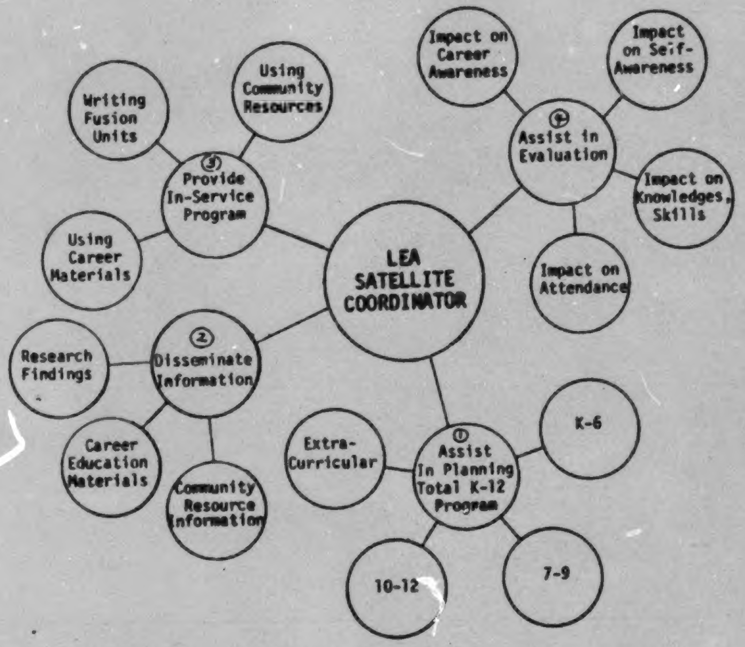


SCOPE OF PROJECT IN TERMS OF LOCAL GROUP INVOLVEMENT

Local educational agency administrators, professional staff, school principals, guidance counselors, teachers, and local university staff members will be involved in developing the total career education program for the district. At the request of local districts, a satellite representative will also meet with curriculum council members, parents, students, and industry/labor representatives to explain the career education concept.

Scope in Terms of Assistance to be Given Local Educational Agencies

The scope of the project in terms of the kinds of assistance to be given local educational agencies is shown below.


Writing Fusion Units
Using Community Resources
③ Provide In-Service Program
Using Career Materials
Impact on Career Awareness
Impact on Self-Awareness
④ Assist in Evaluation
Impact on Knowledges, Skills
Impact on Attendance
LEA SATELLITE COORDINATOR
Research Findings
② Disseminate Information
Career Education Materials
Community Resource Information
Extra-Curricular
① Assist In Planning Total K-12 Program
K-6
10-12
7-9

SCOPE OF PROJECT IN TERMS OF ASSISTANCE
GIVEN TO LOCAL EDUCATIONAL AGENCIES

Through meetings, workshops, and training sessions, LEA satellite coordinators will provide local educational agencies with

1. assistance in planning a total, comprehensive career education program;
2. information about available career education materials and resources;
3. workshops and training sessions to assist teachers and counselors in learning to find and use available career education materials and resources, and how to develop their own career education fusion units;
4. assistance in evaluating and measuring the impact of a career education program in terms of local objectives.

Research Capabilities

The capabilities of the central coordination center and LEA satellite centers and of the staff of each center are described below. Resumes and personal data sheets for proposed staff members, and descriptions of the current local career education effort in the proposed LEA's, are located in Appendix A.

Capabilities of the Proposed Central Coordination Center

The Department of Vocational Education at Colorado State University offers many advantages as the coordination center for the proposed project. First of all, Colorado State University is one among a few that provides a comprehensive and cohesive program in vocational and technical education with nationally-known staff members. It has an impressive record for initiating and conducting conferences on vocational leadership, curriculum, and career education curriculum. Evidence of the importance of this department is that students are attracted into the graduate program from the entire nation. Commonly, basic courses contain enrollments from all vocational fields, which provides a vehicle to explore new concepts and their application to the total program of vocational and career development. Additionally, CSU has been responsible for carrying out funded activities in numerous curriculum development projects.

Over the past two years, a USOE funded career education project (BO-CEC) has maintained a CE library which presently contains over 1,000 texts, curriculum guides, classroom materials, and CE project reports which are available for immediate review. This collection will be on hand for use in the ACE Project.

Another advantage of Colorado State University is the presence of the Human Factors Research Laboratory. The stated purpose of the Laboratory includes selection and placement, learning, educational research, evaluation research, non-intellective factors in behavior, mental health, man-machine systems, management and labor relations, urban and rural affairs, and occupational analysis. The Human Factors Laboratory, together with the affiliated personnel, can be a source of advice, consulting, and interaction. The Human Factors Research Laboratory is a resource for the proposed project.

The Statistics Department and the Computer Center at Colorado State University are well developed and provide an excellent resource for project design, evaluation, and data reduction and analysis.

Capabilities of the Proposed Central Coordination Center Staff

Project Director. The proposed Director of the ACE Project was a Specialist and Professor of Education at The Center for Vocational and Technical Education at Ohio State University. A record of completed research that was funded and refereed by The Center, but completed on the campus of Colorado State University, is evidence of the capability of the proposed Director's competency for developing major research projects and carrying them through to the dissemination and adoption stage. Details about relevant research projects completed by the Director are listed in Appendix B.

Curriculum Coordinator. The proposed Curriculum Coordinator of the ACE Project is an instructor in the Department of Vocational Education at Colorado State University and the Editor and Materials Coordinator of Project Tomorrow, under the direction of Dr. Harry Huffman. The proposed Curriculum

Coordinator has developed and published teacher's and administrator's handbooks on vocational education for students with special needs. She has had seven years of experience with students in a variety of demographic settings similar to the settings of the proposed LEA Satellite Centers. Her extensive experience with students and curriculum in public schools and in developing and coordinating materials on a funded project attest to her capabilities for performing the role of Curriculum Coordinator on the ACE Project.

Capabilities of the Proposed LEA Satellite Centers

The proposed LEA Satellite Centers (map on page) were chosen on the basis of the need and interests of LEA's in the areas for an operational career education program. They were also selected for the diversity of their demographic backgrounds. All of the designated satellite centers have regional resources available in the form of library facilities, experienced personnel and consultants, and cooperating institutions. They have ongoing CE programs which have strong potential for benefiting from the ACE Project and for experiencing incremental change as a result of project activities. The staff proposed for centers have been actively involved in their present locations over the past two years with the proposed project director in a USOE funded career education project.

Capabilities of the Proposed LEA Satellite Center Coordinators

The proposed LEA Satellite Center Coordinators have demonstrated their experience with and commitment to career education and their interest in the ACE Project at a planning meeting in Denver on April 7, 1975. At this session, they each outlined their personal capabilities for performing the role of satellite coordinator and provided input into project plans. They also described the current local effort in CE and the potential for extensive Local Education Agency contributions for the ACE Project. These contributions would be in the form of teacher person-hours, released time, meetings, and conferences at district expense, library and office facilities, and free consultants. This information is detailed on forms prepared at the planning session and is located in Appendix C.

Definition of Terms

Terms used in a unique or special way in this proposal are defined below.

ACE Career Education: Academic enhancement through career education.

ACE Career Education Model: An operational career education model to be demonstrated and delivered as a part of this proposed project.

BO-CEC: Business and Office Career Education Curriculum Project.

CCC: Central Coordination Center located at Colorado State University
LEA: Local Education
LEA: Local Education Agency

LEA Satellite Centers: Centers to be established under the proposed project to assist participating LEA's in bringing about incremental changes in their CE programs. Satellite Centers will be located in Fremont, California; San Diego, California; Fulton County, Georgia; Detroit, Michigan; Plainfield, New Jersey; and Fort Collins, Colorado (in consortium with Pueblo County, Colorado, and Sidney, Nebraska).

Open Communication Process: A system designed to provide complete and continuous two-way flow of information among school administrators, school staff, students, parents, and community.

Treatment Groups: Classes or groups of students with whom one or more components of the ACE Career Education Model is used.

PART II

OPERATIONAL PLAN

II. OPERATIONAL PLAN

The operational plan is composed of two components, as follows:

1. The proposed operational plan and activities of the Central Coordinating Center at CSU--This plan is graphically shown in Figure 1 and will be further discussed in succeeding pages of this chapter.

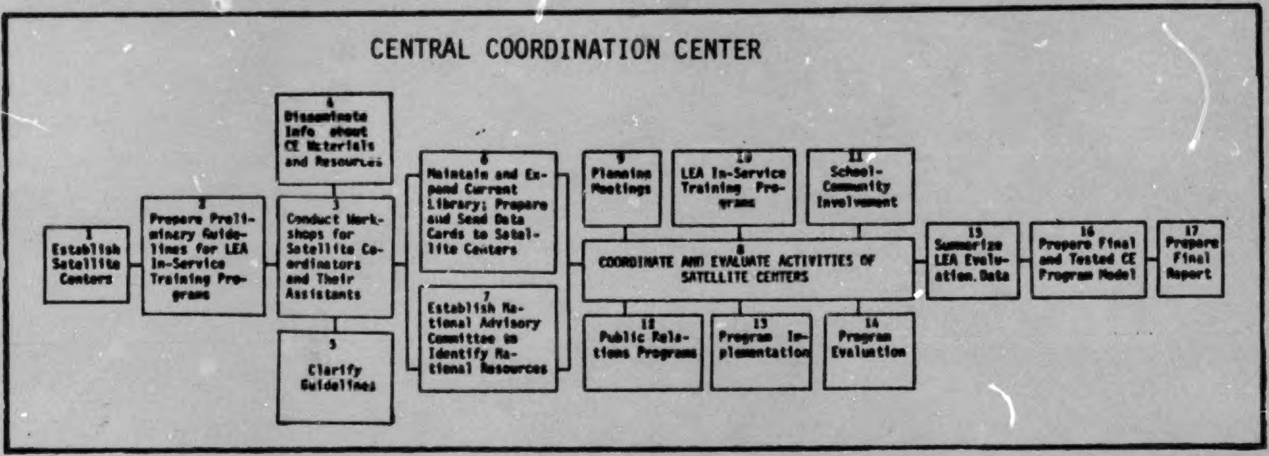

CENTRAL COORDINATION CENTER
1 Establish Satellite Centers
2 Prepare Preliminary Guidelines for LEA In-Service Training Programs
3 Conduct Workshops for Satellite Coordinators and Their Assistants
4 Disseminate Info about CE Materials and Resources
5 Clarify Guidelines
6 Maintain and Expand Current Library; Prepare and Send Data Cards to Satellite Centers
7 Establish National Advisory Committee on Identify National Resources
8 COORDINATE AND EVALUATE ACTIVITIES OF SATELLITE CENTERS
9 Planning Meetings
10 LEA In-Service Training Programs
11 School-Community Involvement
12 Public Relations Programs
13 Program Implementation
14 Program Evaluation
15 Summarize LEA Evaluation Data
16 Prepare Final and Tested CE Program Model
17 Prepare Final Report

FIGURE 1

2. The proposed operational plan and activities of the LEA Satellite Centers--This plan is graphically shown in Figure 2 and will be discussed later in this chapter.

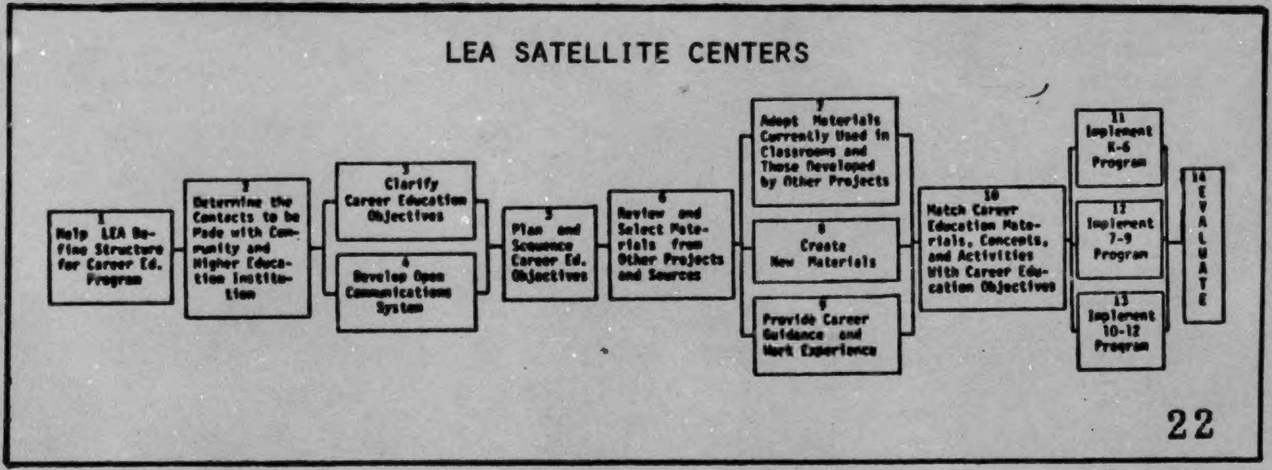
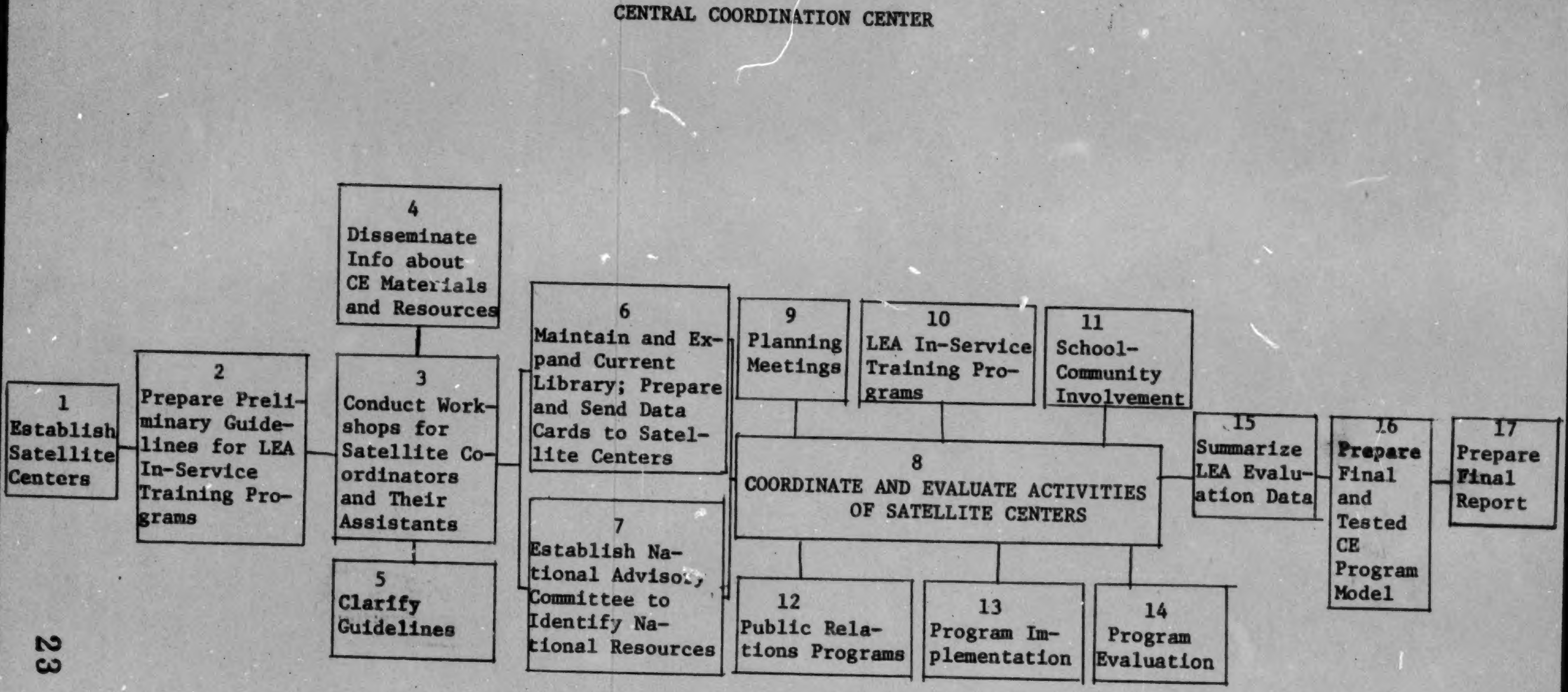

LEA SATELLITE CENTERS
1 Help LEA Define Structure for Career Ed. Program
2 Determine the Contacts to be Made with Community and Higher Education Institution
3 Clarify Career Education Objectives
4 Develop Open Communications System
5 Plan and Sequence Career Ed. Objectives
6 Review and Select Materials from Other Projects and Sources
7 Adopt Materials Currently Used in Classrooms and Those Developed by Other Projects
8 Create New Materials
9 Provide Career Guidance and Work Experience
10 Match Career Education Materials, Concepts, and Activities With Career Education Objectives
11 Implement K-6 Program
12 Implement 7-9 Program
13 Implement 10-12 Program
14 EVALUATE

FIGURE 2

Figures 1 and 2 have been retyped at the ERIC Clearinghouse in Career Education and are reproduced on the next two frames.


CENTRAL COORDINATION CENTER
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3 Conduct Workshops for Satellite Coordinators and Their Assistants
4 Disseminate Info about CE Materials and Resources
5 Clarify Guidelines
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10 LEA In-Service Training Programs
11 School-Community Involvement
12 Public Relations Programs
13 Program Implementation
14 Program Evaluation
15 Summarize LEA Evaluation Data
16 Prepare Final and Tested CE Program Model
17 Prepare Final Report

FIGURE 1

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LEA SATELLITE CENTERS

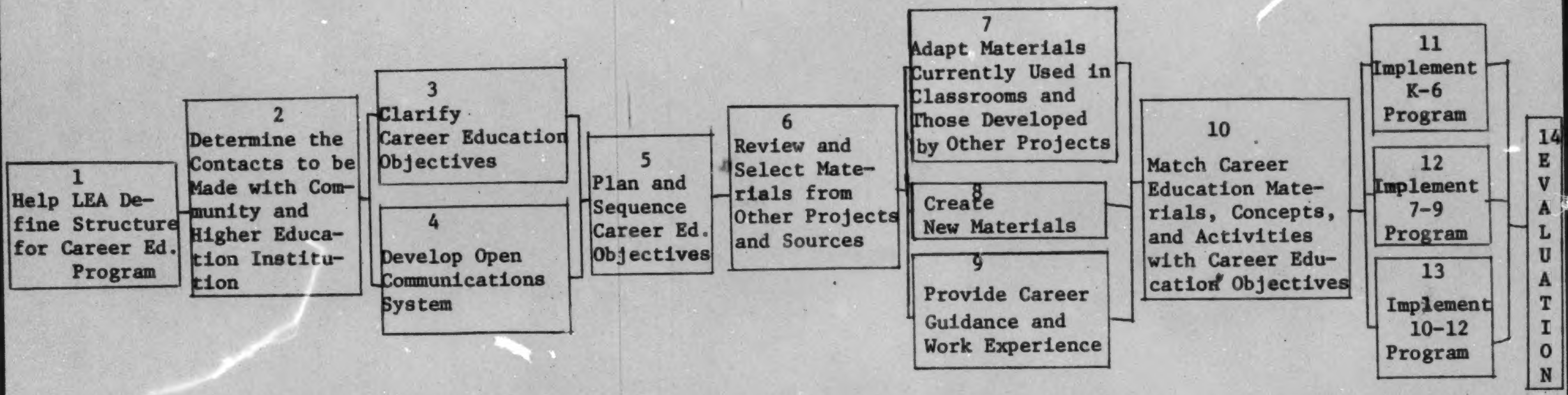
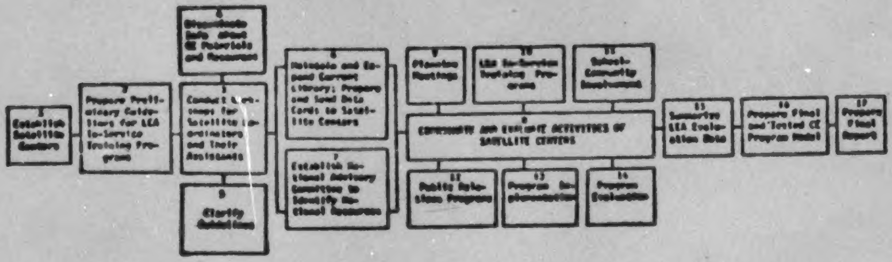

1
Help LEA Define Structure for Career Ed. Program
2
Determine the Contacts to be Made with Community and Higher Education Institution
3
Clarify Career Education Objectives
4
Develop Open Communications System
5
Plan and Sequence Career Ed. Objectives
6
Review and Select Materials from Other Projects and Sources
7
Adapt Materials Currently Used in Classrooms and Those Developed by Other Projects
8
Create New Materials
9
Provide Career Guidance and Work Experience
10
Match Career Education Materials, Concepts, and Activities with Career Education Objectives
11
Implement K-6 Program
12
Implement 7-9 Program
13
Implement 10-12 Program
14
EVALUATION

FIGURE 2

Retyped at the ERIC Clearinghouse in Career Education because of small type in original. This figure is repeated in reduced form several times throughout the text.

Operational Plan for Central Coordination Center

The operational plan for the Central Coordination Center will be discussed according to the numbered cells in Figure 1.

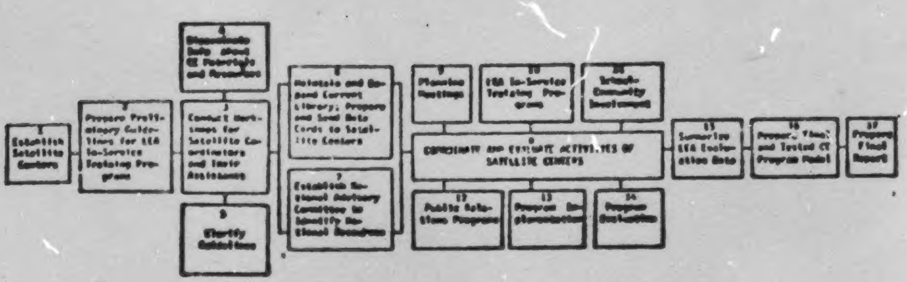

Prepare Preliminary Guidelines for LEA In-Service Training Programs
Conduct Workshops for Satellite Coordinators and their Assistants
Clarify Guidelines
Establish Regional Advisory Committee to Identify Regional Resources
COORDINATE AND EVALUATE ACTIVITIES OF SATELLITE CENTERS
Planning Meetings
LEA In-Service Training Programs
School-Community Involvement
Public Relations Programs
Program Evaluation
Summarize LEA Evaluation Data
Prepare Final and Tested CE Program Model
Prepare Final Report

Establish LEA Satellite Center (Cell 1)

The Central Coordination Center Staff, composed of a Director and a Curriculum Coordinator, will be located at Colorado State University in Fort Collins, Colorado. The six Satellite Centers will be established in (1) Fremont, California; (2) San Diego, California; (3) Fulton County, Georgia; (4) Detroit, Michigan; (5) Plainfield, New Jersey; and (6) Fort Collins, Colorado (in consortium with Pueblo County, Colorado, and Sidney, Nebraska). Each Center will be related to a university school of education in the adjacent community.

Prepare Preliminary Guidelines for LEA In-Service Training Programs to Effect Incremental Changes (Cell 2)

Prior to a workshop for the coordinators of the LEA Satellite Centers, the Central Coordination Center Staff will draw up and submit to the LEA Satellite Coordinators, for review, a set of guidelines to effect incremental changes in CE programs. The guidelines will be the basis for an in-service training program to be conducted by an LEA Satellite Coordinator for local educational agency administrators, school staff, and community leaders to help them develop and implement their own comprehensive career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COORDINATE AND EVALUATE ACTIVITIES OF SATELLITE CENTERS
Public Relations Programs
Program Implementation
Program Evaluation
Summarize LEA Evaluation Data
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Prepare Final Report

education program. The guidelines will describe the procedures to be used in carrying out the operational plan for LEA's. This plan is schematically shown in Figure 2, which will be discussed later in this chapter.

Conduct Workshops for LEA Satellite Coordinators (Cells 3, 4, and 5)

The Central Coordination Center Staff will conduct a workshop (Cell 3) in July or August, 1975, for the LEA Satellite Coordinators. The content of the workshop will deal with the guidelines and their implementation as described above. At the same time, the staff will disseminate CE materials gathered from funded projects (Cell 4) and revise the guidelines (Cell 5) to meet the varied needs of the LEA's to effect incremental changes. (See Figure 3 for a partial list of projects.)

Maintain and Expand Library; Send Data Cards to LEA's (Cell 6)

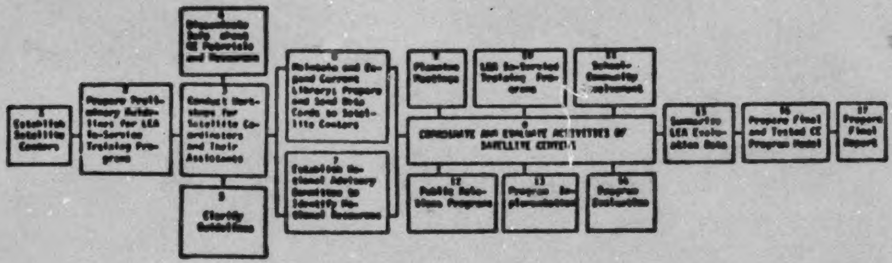
To assist LEA's in their search for materials that will enable them to meet their career education objectives, it is proposed that the Central Coordination Staff will:

1. Maintain a library of career education publications.
2. Prepare and disseminate data cards describing each of these materials.
3. Assist LEA's in sharing materials, ideas, and experiences.

PARTIAL LISTING OF CAREER EDUCATION PROJECTS

PROJECT	DIRECTOR/HEADQUARTERS
Alliance for Career Education	The Center for Vocational Education 1960 Kenny Road Columbus, Ohio 43210
The Consortium for Career Education Development OEG-72-4625	The American Institutes for Research in Behavioral Sciences Post Office Box 1113 Palo Alto, California 94302
Career Education Curriculum Cluster Projects: Personal Service; Public Service; Transportation; Agri-Business & Natural Resources; Communications & Media; Construction; Consumer & Homemaking Occupations; Environment; Fine Arts & Humanities; Health Occupations; Hospitality & Recreation; Manufacturing; Marine Science; Marketing & Distribution; Office Occupations	As shown on U.S.O.E. List of Career Education Curriculum Contractors
Enrichment of Teacher and Counselor Competencies in Career Education (ETC) (K-6) OEG-0-72-4626	Center for Educational Studies School of Education Eastern Illinois University Charleston, Illinois 61920
Ohio's Career Education Continuum OE Log 2510-72032	Ohio Department of Education Division of Vocational Education Home Economics Section Ohio Departments Building Columbus, Ohio 43215
Career Development--Special Education OEG-0-72-0291	Wisconsin Department of Public Instruction and/or Division for Handicapped Children 126 Langdon Street Madison, Wisconsin 53702
North Dakota Exemplary Project In Career Education OEG-0-70-4752(361)	Larry Selland North Dakota State Board for Vocational Education State Office Building 900 East Boulevard Bismarck, North Dakota
K-14 Career Education Guide OEG-0-71-1027(361)	Career Education Center 3811 Memorial Drive Sheboygan, Wisconsin 53081

FIGURE 3


Establish Satellite Centers
Prepare Preliminary Guidelines for LEA In-Service Training Programs
Conduct Workshops for Satellite Coordinators and Their Assistants
Clarify Guidelines
Maintain and Expand Current Library; Prepare and Send Data Cards to Satellite Centers
Planning Meetings
LEA In-Service Training Programs
School-Community Involvement
COORDINATE AND EVALUATE ACTIVITIES OF SATELLITE CENTERS
Public Relations Programs
Program Implementation
Program Evaluation
Summarize LEA Evaluation Data
Prepare Final and Tested CE Program Model
Prepare Final Report

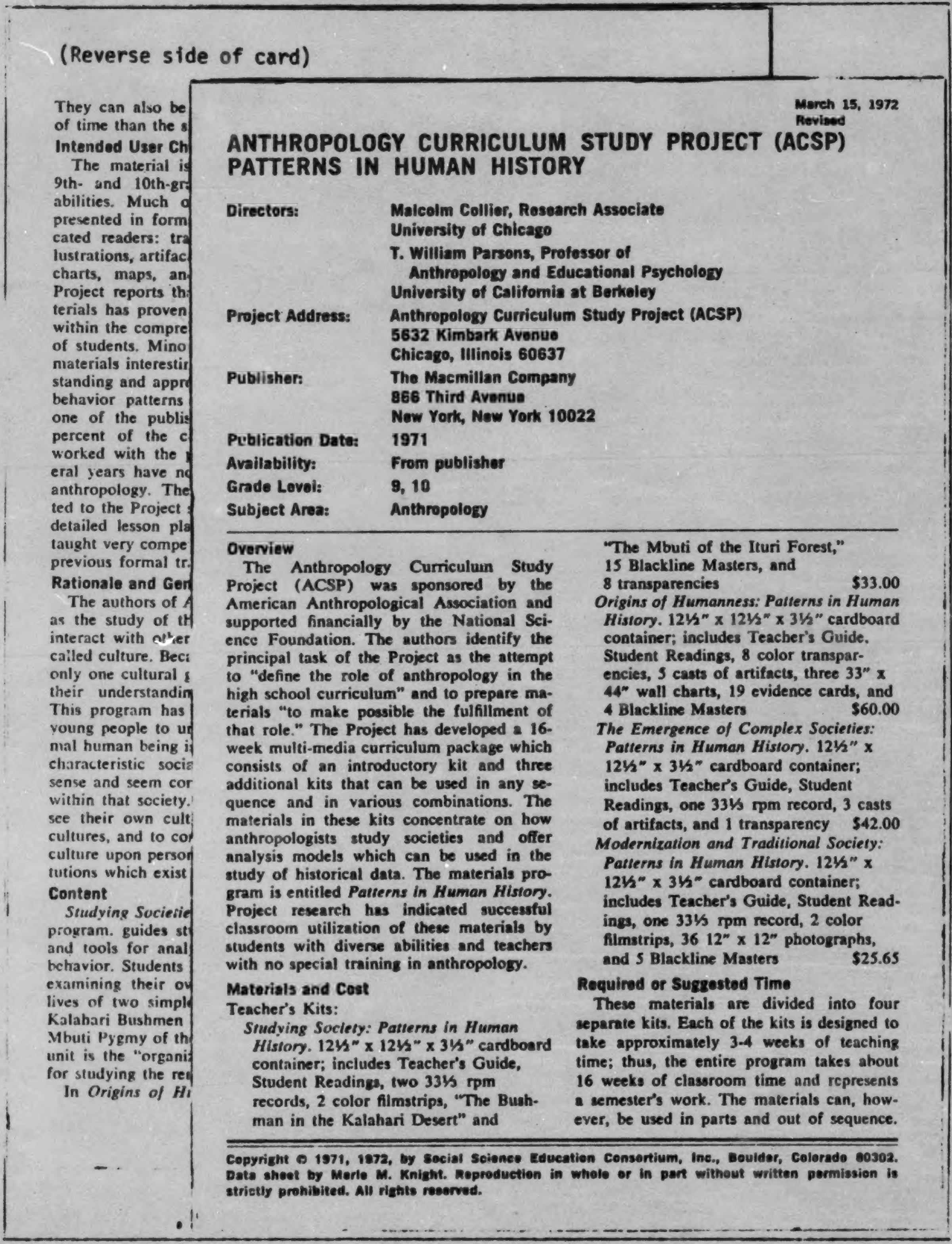
Library. Since September of 1973, staff members of a USOE funded project (Contract # OEC-0-73-5230) have maintained a CE library in connection with Colorado State University's collection. Among the materials currently on hand, and available for immediate review are over 1,000 texts, curriculum guides, classroom materials, and career education project reports.

So that the collection in this library will remain up to date, the Curriculum Coordinator on the Central Coordination Staff, in addition to reviewing professional literature, will make a periodic ERIC search. The Curriculum Coordinator will obtain new materials as they become available and prepare data cards describing the materials. The data cards will be sent to LEA Satellite Centers.

Data Cards. The Curriculum Coordinator will prepare and send to the LEA's data cards similar in format to the one which appears on the following page. The content of the data cards will include the author, publisher, overview, cost, content, suggested grade levels, general objectives, and potential for leading to incremental changes. The coordinators of the LEA Satellite Centers will also supply data cards to the Curriculum Coordinator for dissemination to the other LEA's.

LEA Newsletter. The Curriculum Coordinator will prepare and send a semi-monthly newsletter to the participating LEA's to maintain communications and to describe materials developed or adapted by teachers in the LEA's and how to obtain them.

SUGGESTED FORMAT FOR DATA CARDS



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March 15, 1972
Revised

ANTHROPOLOGY CURRICULUM STUDY PROJECT (ACSP) PATTERNS IN HUMAN HISTORY

Directors:	**Malcolm Collier, Research Associate** **University of Chicago** **T. William Parsons, Professor of Anthropology and Educational Psychology** **University of California at Berkeley**
Project Address:	**Anthropology Curriculum Study Project (ACSP)** **5632 Kimbark Avenue** **Chicago, Illinois 60637**
Publisher:	**The Macmillan Company** **866 Third Avenue** **New York, New York 10022**
Publication Date:	**1971**
Availability:	**From publisher**
Grade Level:	**9, 10**
Subject Area:	**Anthropology**

Overview

The Anthropology Curriculum Study Project (ACSP) was sponsored by the American Anthropological Association and supported financially by the National Science Foundation. The authors identify the principal task of the Project as the attempt to "define the role of anthropology in the high school curriculum" and to prepare materials "to make possible the fulfillment of that role." The Project has developed a 16-week multi-media curriculum package which consists of an introductory kit and three additional kits that can be used in any sequence and in various combinations. The materials in these kits concentrate on how anthropologists study societies and offer analysis models which can be used in the study of historical data. The materials program is entitled *Patterns in Human History*. Project research has indicated successful classroom utilization of these materials by students with diverse abilities and teachers with no special training in anthropology.

Materials and Cost

Teacher's Kits:

Studying Society: Patterns in Human History. 12½" x 12½" x 3½" cardboard container; includes Teacher's Guide, Student Readings, two 33⅓ rpm records, 2 color filmstrips, "The Bushman in the Kalahari Desert" and "The Mbuti of the Ituri Forest," 15 Blackline Masters, and 8 transparencies	$33.00
Origins of Humanness: Patterns in Human History. 12½" x 12½" x 3½" cardboard container; includes Teacher's Guide, Student Readings, 8 color transparencies, 5 casts of artifacts, three 33" x 44" wall charts, 19 evidence cards, and 4 Blackline Masters	$60.00
The Emergence of Complex Societies: Patterns in Human History. 12½" x 12½" x 3½" cardboard container; includes Teacher's Guide, Student Readings, one 33⅓ rpm record, 3 casts of artifacts, and 1 transparency	$42.00
Modernization and Traditional Society: Patterns in Human History. 12½" x 12½" x 3½" cardboard container; includes Teacher's Guide, Student Readings, one 33⅓ rpm record, 2 color filmstrips, 36 12" x 12" photographs, and 5 Blackline Masters	$25.65

Required or Suggested Time

These materials are divided into four separate kits. Each of the kits is designed to take approximately 3-4 weeks of teaching time; thus, the entire program takes about 16 weeks of classroom time and represents a semester's work. The materials can, however, be used in parts and out of sequence.

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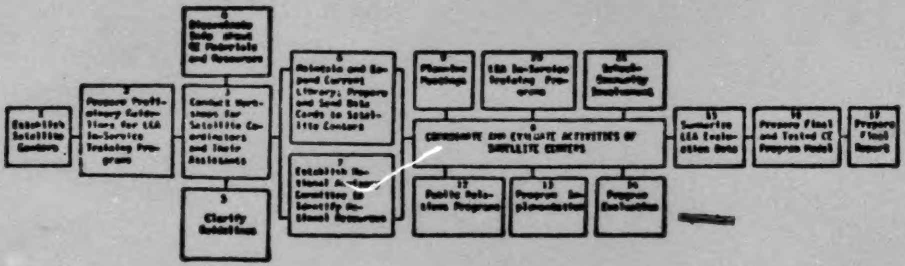
FIGURE 4


1 Establish Satellite Centers
2 Prepare Preliminary Guidelines for LEA In-Service Training Programs
4 Disseminate Info about CE Materials and Resources
3 Conduct Workshops for Satellite Coordinators and Their Assistants
5 Clarify Guidelines
6 Maintain and Expand Current Library; Prepare and Send Data Cards to Satellite Centers
7 Establish National Advisory Committee to Identify National Resources
9 Planning Meetings
10 LEA In-Service Training Programs
11 School-Community Involvement
8 COORDINATE AND EVALUATE ACTIVITIES OF SATELLITE CENTERS
12 Public Relations Programs
13 Program Implementation
14 Program Evaluation
15 Summarize LEA Evaluation Data
16 Prepare Final and Tested CE Program Model
17 Prepare Final Report

Establish National Advisory Committee (Cell 7)

It is proposed that a National Advisory Committee will be established to help with the identification of additional national resources that are in the process of development and tryout and which are available to LEA's.

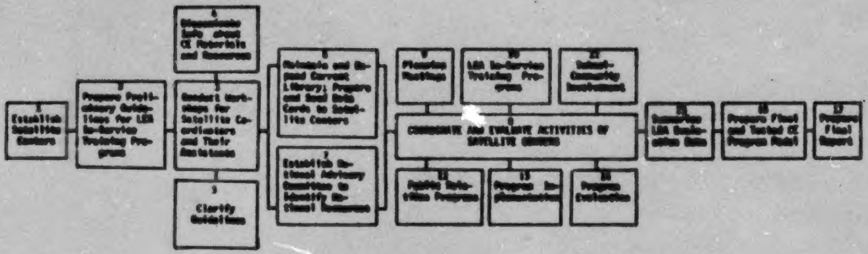
Coordinate and Evaluate Activities of LEA Satellite Centers (Cells 8, 9, 10, 11, 12, 13, 14)

A major task of the Central Coordination Center Staff would be that of coordinating and evaluating the multiple activities of the LEA Satellite Centers.

Planning Meetings (Cell 9). The Central Coordination Center (CCC) Staff will provide training for LEA Satellite Coordinators for conducting LEA planning meetings and will disseminate additional information about the meetings through the LEA Newsletter. The training will include sample agendas, questions for discussion, meeting objectives, and media such as handouts and visuals.

LEA In-Service Training Programs (Cell 10). The CCC Staff, in its workshops and through its Newsletters, will provide training for LEA's for conducting LEA in-service programs.

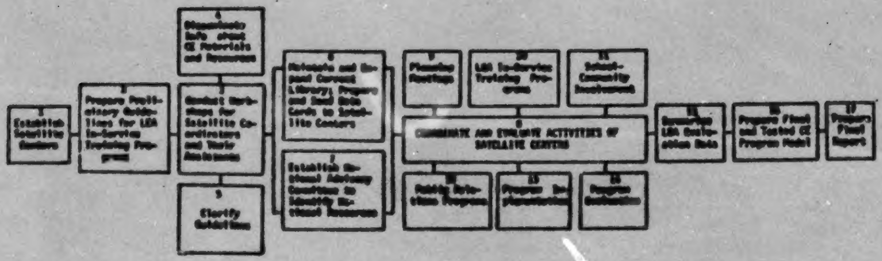
School-Community Involvement (Cell 11) Through Public Relations (Cell 12). The CCC Staff will provide the LEA Coordinators with a comprehensive plan for public relations and open communications to cause effective


Establish Satellite Centers
Clarify Guidelines
Coordinate and Evaluate Activities of Satellite Centers
Planning Meetings
LEA In-Service Training Program
School-Community Involvement
Program Evaluation
Prepare Final Report

community involvement. This plan is described later in this chapter under the operation of the LEA Satellite Centers. The plan is based on Bortner's Public Relations for Public Schools.

Program Implementation (Cell 13). The proposed LEA Satellite Coordinators have already reviewed this proposal and are committed to its implementation. Their proposed activities and events are detailed in their statements, which appear in the Appendices of this proposal. Their implementation will be continuously reviewed throughout the duration of the project by the CCC Staff. Particular attention will be given to implementation events that lead to incremental change.

LEA Program Evaluation (Cell 14). The CCC Staff will evaluate the effectiveness of the LEA's in meeting their objectives according to the evaluation chapter in this proposal. Essentially, the LEA program objectives and their related activities represent treatments of the designated populations with which the LEA's are working. Before the information on student outcomes and other data are gathered, the CCC Staff will have the significant role of determining whether these treatments occurred. Thus, each LEA will be evaluated on implementing their program objectives or treatments and their gathering of hard data on student outcomes according to the evaluation plan.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COORDINATE AND EVALUATE ACTIVITIES OF SATELLITE CENTERS
Summarize LEA Evaluation Data
Prepare Final and Tested CE Program Model
Prepare Final Report

Summarize LEA Evaluation Data (Cell 15)

The CCC Staff will assist the LEA's in gathering data on incremental changes in their populations, according to plans set forth in the evaluation chapter of this proposal. Briefly, the total evaluation plan covers student outcomes, program objectives, and project management. The first is of paramount importance; hence, the LEA's will be assisted in gathering student outcome data that relate to the LEA program objectives and treatments. The summary will present an analysis of the resulting outcomes according to each LEA actual operational plan, which is in itself a treatment by site.

Prepare Final and Tested CE Operational Model (Cell 16)

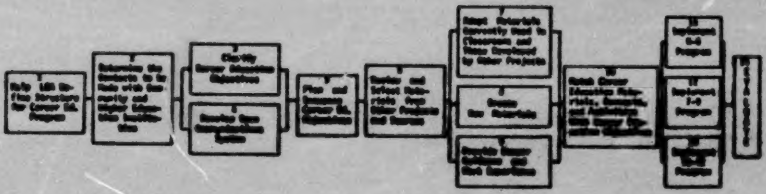
The CCC Staff will develop a detailed description of the resulting program objectives that were effectively implemented in each LEA. An analysis of the foregoing will be the basis for a final and tested model that contains the elements of beneficial transportability to other LEA's in the nation. Those elements which operate best in a particular demographic setting will be specified.

Prepare Final Report (Cell 17)

The CCC Staff will prepare a final report for the 1975-1976 year which will include the following: (1) the final and tested LEA model (Cell 16), (2) the implemented program objectives or treatments of each LEA as measured by actual changes affected by the LEA, (3) a demographic description of each treatment population by LEA, (4) an analysis of the incremental changes in student outcomes by LEA, and (5) an analysis of incremental changes in LEA treatments and student outcome data according to the plan in the evaluation chapter.

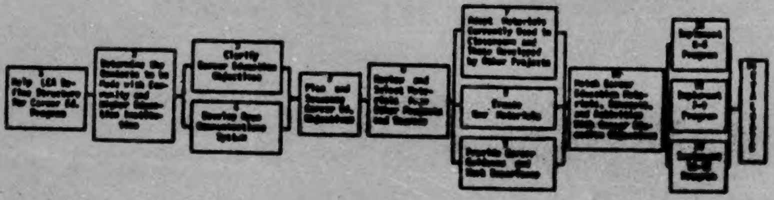
Operational Plan for LEA Satellite Centers

The operational plan for LEA Satellite Centers will be discussed according to the numbered cells in the figure below.



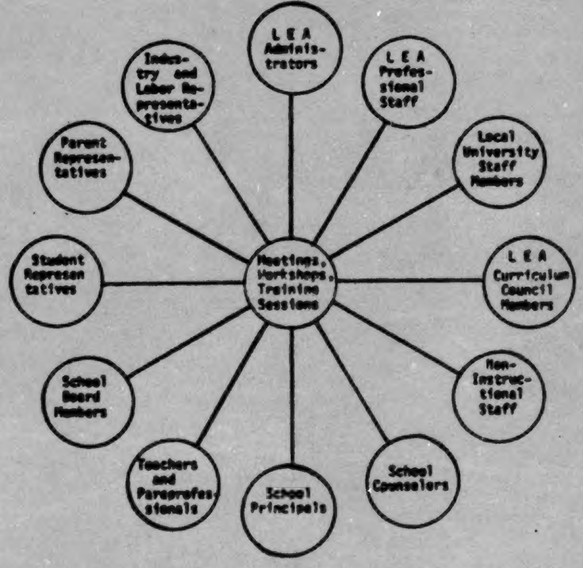
Help LEA Define Structure for CE Program (Cell 1)

The LEA Satellite Coordinator will assist the LEA in reviewing Steps 2-14, which should result in the definition of the LEA's role and plan of activities. A list of proposed activities prepared by each LEA Coordinator appears in the Appendices. The Coordinator will review these activities in light of further discussion with the LEA.

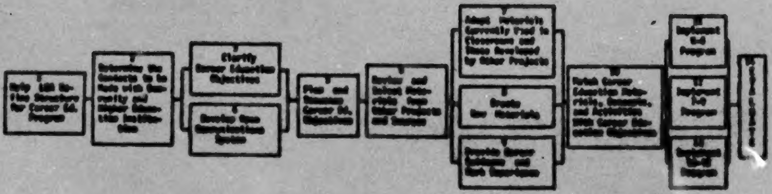


Determine Contacts to be Made with Community And Higher Education Institutions (Cell 2)

The Satellite Coordinator will help the LEA to develop a plan for involving various components of the community in the career education effort as shown in the illustration below. The LEA will be responsible for making the community contacts and establishing advisory councils.



SCOPE OF PROJECT IN TERMS OF LOCAL GROUP INVOLVEMENT

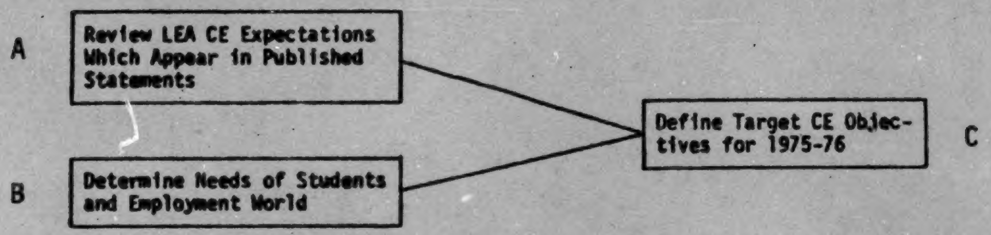


Clarification of Career Education Objectives with the Component Groups of a Local Education Agency (LEA (Cell 3)

The objectives of career education programs for a particular LEA, group of LEA's, or the in-service training program of a college or university program serving LEA's will be established by a series of meetings with representatives of the appropriate groups. Concurrent to this establishment of objectives should be complete and open communication with the total membership of all component groups which include school administrators, the school staff, the students, the parents, and the community. This open communication is continuous throughout the development, clarification, adoption, implementation, and evaluation of the CE objectives and indeed the program itself.

A discussion devoted to the establishment of the CE objectives of the LEA follows.

Objectives Establishment. Three considerations must be taken into account: (A) What are the stated expectations of the CE program? (B) What are the needs of the students? And what is the job market profile? (C) Based on A and B, what should be the target objectives for the CE effort for the current school year (1975-1976)? A pictorial of these considerations is shown at the top of the next page.


A
Review LEA CE Expectations Which Appear in Published Statements
B
Determine Needs of Students and Employment World
Define Target CE Objectives for 1975-76
C

The procedures to be used are discussed according to the three major questions stated in the preceding paragraph.

A. Expectations (Things to be done before meetings are held.)

1. Ask the superintendent or in-service coordinator to provide their stated career education objectives, which normally will appear in published reports of the superintendent to the school board, faculty, students, and parents. It is expected that all participating LEA's or education agencies will already have such published statements.
2. Classify these objectives according to the 33 objectives[1] shown on the next page from the Handbook for Evaluation of Career Education Programs, which describes ". . . an intensive effort of the Office of Career Education (USOE) to specify the objectives associated with the concept of career education."[2]
3. Prepare handout of the classified objectives of the LEA and include in the handout a list of any of the 33 which do not appear in the LEA's published statements.

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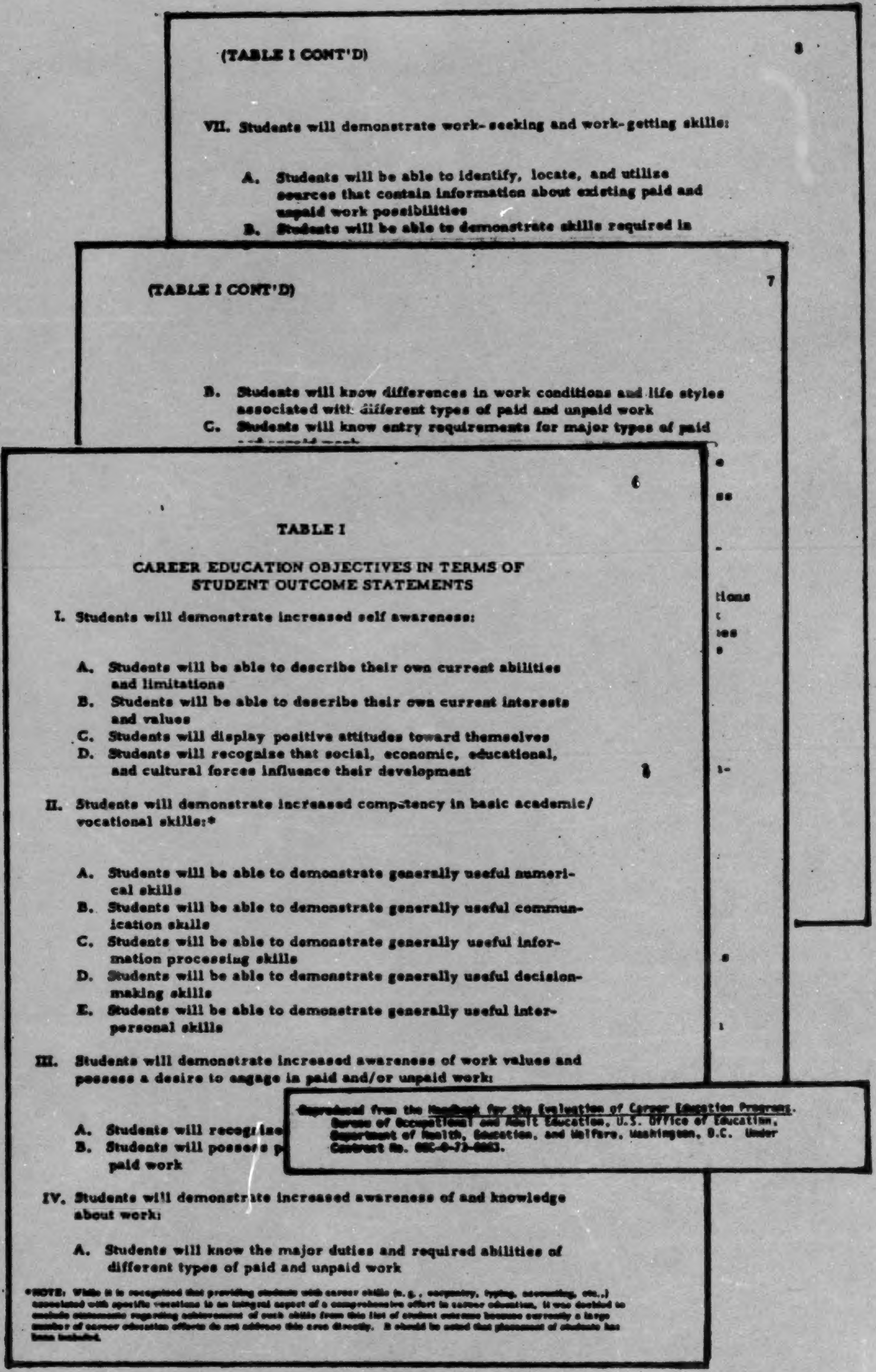
[1] Reproduced from the Handbook for the Evaluation of Career Education Programs. Bureau of Occupational and Adult Education. U.S. Office of Education, Department of Health, Education, and Welfare, Washington, D.C. Under Contract No. OEC-0-73-6663. p. 6-8.

[2] Ibid, p. 3.



8

(TABLE I CONT'D)

VII. Students will demonstrate work-seeking and work-getting skills:

A. Students will be able to identify, locate, and utilize sources that contain information about existing paid and unpaid work possibilities
B. Students will be able to demonstrate skills required in

7

(TABLE I CONT'D)

B. Students will know differences in work conditions and life styles associated with different types of paid and unpaid work
C. Students will know entry requirements for major types of paid

6

TABLE I

CAREER EDUCATION OBJECTIVES IN TERMS OF STUDENT OUTCOME STATEMENTS

I. Students will demonstrate increased self awareness:

A. Students will be able to describe their own current abilities and limitations
B. Students will be able to describe their own current interests and values
C. Students will display positive attitudes toward themselves
D. Students will recognize that social, economic, educational, and cultural forces influence their development

II. Students will demonstrate increased competency in basic academic/vocational skills:*

A. Students will be able to demonstrate generally useful numerical skills
B. Students will be able to demonstrate generally useful communication skills
C. Students will be able to demonstrate generally useful information processing skills
D. Students will be able to demonstrate generally useful decision-making skills
E. Students will be able to demonstrate generally useful interpersonal skills

III. Students will demonstrate increased awareness of work values and possess a desire to engage in paid and/or unpaid work:

A. Students will recognize
B. Students will possess p
paid work

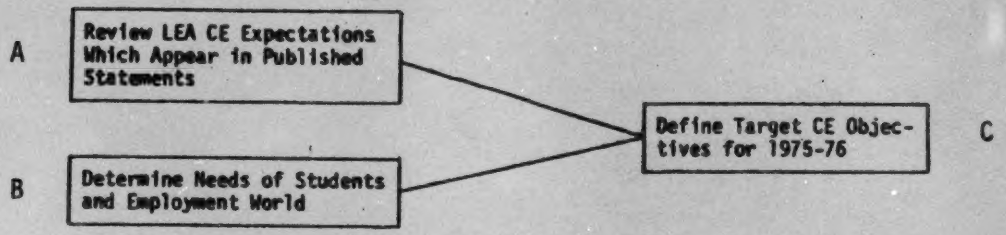
IV. Students will demonstrate increased awareness of and knowledge about work:

A. Students will know the major duties and required abilities of different types of paid and unpaid work

*NOTE: While it is recognized that providing students with career skills (e.g., carpentry, typing, accounting, etc.) associated with specific vocations is an integral aspect of a comprehensive effort in career education, it was decided to exclude statements regarding achievement of such skills from this list of student outcomes because currently a large number of career education efforts do not address this area directly. It should be noted that placement of students has been included.

Reproduced from the Handbook for the Evaluation of Career Education Programs. Bureau of Occupational and Adult Education, U.S. Office of Education, Department of Health, Education, and Welfare, Washington, D.C. Under Contract No. OEC-0-73-0063.

FIGURE 5

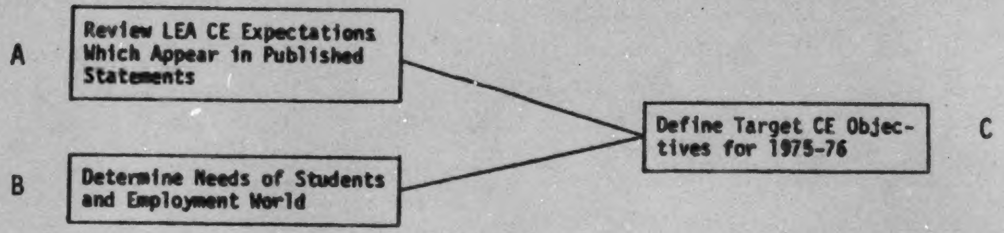

A
Review LEA CE Expectations Which Appear in Published Statements
B
Determine Needs of Students and Employment World
Define Target CE Objectives for 1975-76
C

B. Student Needs and Job Market (Things to be done before meetings are held.)

1. Ask superintendent or in-service coordinator to provide a profile of students' preliminary choice of careers (at some grade level such as 10th grade). Provide an instrument in case it is needed.
2. Ask for or obtain a job market profile for which the LEA prepares students (state, regional, or national). If one is not available, provide assistance in obtaining one.

C. Target Objectives for the LEA or University Career Education Thrust (Series of meetings for group decision.)

1. At an LEA meeting called by the superintendent or chairman of an advisory committee, have a presentation of the handouts and information collected in A and B above. The remaining steps would be completed at this meeting and subsequent meetings.
2. Establish target objectives, which will involve four decisions.
    a. Decide where the main thrust will be, such as the elementary, the junior high/middle grades, the senior high level, or a combination of levels.


A
Review LEA CE Expectations Which Appear in Published Statements
B
Determine Needs of Students and Employment World
Define Target CE Objectives for 1975-76
C

b. Determine the number and list of teachers to be involved. Also, determine the present attitudes and perceptions of teachers by means of the instrument in Figure 6, which is shown on the next page. This instrument attempts to find out the teacher's current beliefs about the contribution of the teacher's subject matter to eight goals (only one page of the instrument is shown). In addition, the instrument attempts to find out the perceptions of the teacher concerning the manner in which career education will be introduced in the school program. This information is imperative to an in-service training program since it establishes benchmarks from which to build.

c. Determine the mode of in-service education such as (1) a single LEA effort, (2) main effort by the education division or college of a university, or (3) a cooperative effort between an LEA and a university.

d. Establish the projected student outcomes for 1975-1976 in behavioral or other terms as classified in, or chosen from the 33 objectives.

GOAL STATEMENT: Students will recognize their personal abilities and interests and the effect these abilities and interests have on their futures.

QUESTION #1:

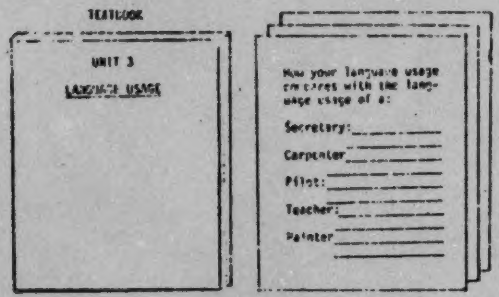
To what degree do you believe that the courses you teach can contribute to the achievement of the above goal ? (circle one)

none little moderately much very much

QUESTION #2:

If your school district decides to place more emphasis on the achievement of the above goal and is considering the three methods shown below, which method do you feel would be most effective? (circle one) Which method do you feel would be the least effective? (X out one)

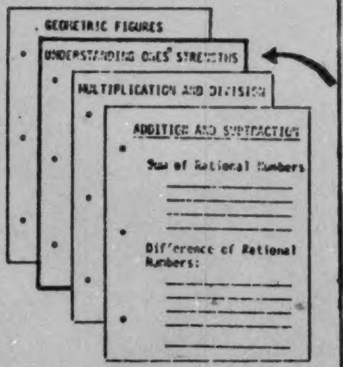
(1)



METHOD #1 INFUSION

You would help achieve the goal through the use of resources and activities that tie in directly with your subject matter.

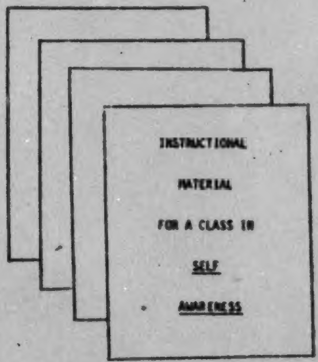
(2)


GEOMETRIC FIGURES
UNDERSTANDING ONES' STRENGTHS
MULTIPLICATION AND DIVISION
ADDITION AND SUBTRACTION
Sum of Rational Numbers
Difference of Rational Numbers:

METHOD #2 SEPARATE UNITS

You would devote blocks of your class time to units that deal exclusively with the goal.

(3)

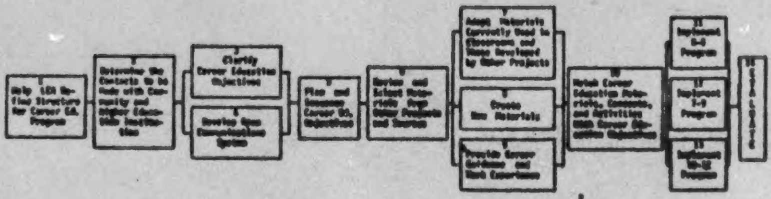


METHOD #3 SEPARATE CLASS

A separate course would be added to the curriculum for the purpose of achieving the goal.

Sample Instrument for Measuring Teachers' Attitudes/Perceptions Toward Career Education

FIGURE 6


1
Help LEA Define Structure for Career Ed. Program
2
3
Clarify Career Education Objectives
4
Develop Open Communications System
5
6
7
Adapt Materials Currently Used in Classrooms and Those Developed by Other Projects
8
Create New Materials
9
Provide Career Guidance and Work Experience
10
11
Implement K-6 Program
12
Implement 7-9 Program
13
Implement 10-12 Program
14

Develop Open Career Education Communications System (Cell 4)

The extensive reorientation of beliefs about the American school and what it can do for the career education of American children, youth, and adults requires early and continuous communication about the entire career education program in order to assure a fair and valid adoption, institution, and implementation of the career education program.

The Open Career Education Communications program with all the component groups of an LEA requires that responsible parties for the entire career education program make appropriate contacts with other LEA groups. Some of the needed contacts are detailed in Figure 7 on the following page. Many others are possible. Also, in many cases, the responsible and contacted parties need to change roles to maintain two-way communication.

An example of the kinds of activities that should be performed in the open communications program is shown in Figure 8 for the school staff component. Note that activities and aids to conduct the activity are shown for each relationship.

Plan and Sequence Careers to be Explored (Cell 5)

The ACE Career Education Model emphasizes that the local educational agency should early identify careers to be explored and then sequence

OPEN COMMUNICATION PROCESS

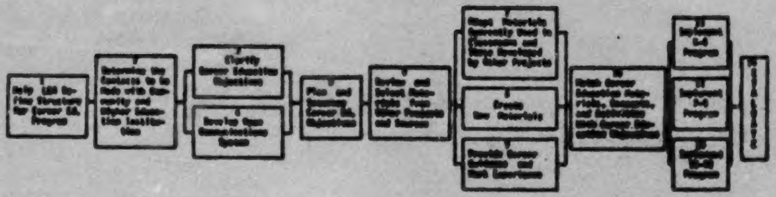
Component	PR and Communication Relationship	
	Responsible Parties	Contacted Parties
Administrators	Superintendent	School Board
	Superintendent	Director of Public Relations
	Superintendent	Principals and Curriculum Directors
	Superintendent	Administrators and School Staff
The School Staff	Teachers	Students
	Teachers	Parents
	Administrators	Teachers Association
	Administrators	Nonteaching Staff
	Nonteaching Staff	Community
The Student	Students	Parents
	Students	Employers
	Student Curricular and other clubs	Community and Employers
The Parent	Parents	School Staff
	Parent Organizations	School Staff
	Community Employers	School
The Community	Community Organizations	School
	Lay Advisory Groups	School
	Urban Community Groups	School

FIGURE 7

SAMPLE PLAN FOR THE OPEN COMMUNICATION PROCESS

Component	PR and Communication Relationship		Activities and Occasions		Aids
	Responsible Parties	Contacted Parties	Initial	On-going	
School Staff	Teachers	Students	Handout brochures, invite speakers, conduct field trips	Class activities, work experience programs	CE Units and Career Guidance Program; Work Experience Programs: (1) Cluster-dependent, (2) General, (3) Exploratory; Brochures
	Teachers	Parents	Teacher assistance with parent organization programs on CE	Parent days and conferences	Discussion guides and suggested CE program activities for parent organizations
	Administrators	Teachers Association	Representation on CE curriculum committee	Contract negotiations on time for curriculum development	Models for released time and other incentives, example: rotation schedule
	Administrators	Nonteaching Staff	Representation on CE objectives committee	Reports to and for nonteaching staff in school staff newsletter and other media	Discussion Guide for Nonteaching Staff, school brochure on CE
	Nonteaching Staff	Community	School staff newsletter and other media announcements of nonteaching staff representation	Constant media recognition of services provided; spokesperson at community organizations	A list of possible ways nonteaching staff can promote career education. Examples to be included (a) provide career information, (b) provide work experience opportunity, (c) be a spokesperson in the community

FIGURE 8



these careers to prevent excessive repetition of, or gaps in, the career information provided in the curriculum.[1] To assist the local educational agency perform these tasks, the ACE Career Education Model provides for two basic career education planning boards.

Planning Board # 1: Identifying Careers to be Explored. The first planning board is used to record, by cluster, all occupations to be explored in the curriculum. The local educational agency, or a locally appointed career education committee, tentatively decides upon a basic list of careers about which information should be provided in grades K-12. The names of these occupations are written on pieces of cardboard, color-coded according to occupational cluster,[2] and placed on a felt-backed planning board. Figure 9 on the following page shows how the planning board might look once the occupations to be explored have been decided upon and grouped by clusters.

After the occupations to be explored have been decided upon and displayed on planning board # 1, the local educational agency is ready to

---

[1] The identification and sequencing of careers is done merely to ensure that students will systematically be exposed to a wide range of occupations. The sequencing of careers is not intended to prevent students from exploring particular careers at times other than those designated in the sequence plan.

[2] U.S.O.E. cluster designations might be used for grouping occupations, or other cluster groupings might be used. For example, San Diego used 12 cluster headings rather than the 15 used by U.S.O.E.

PLANNING BOARD # 1

OCCUPATIONS TO BE EXPLORED IN GRADES K-12

CONSTRUCTION	
Architecture	Landscape Architect
	Building Architect
	Draftsman
Engineering	Civil Engineer
	Construction Engineer
	Contractor
	Surveyor
Machinery Operation	Bulldozer Operator
	Hoist Operator
	Tractor Operator
	Machine Mechanic
Building Trades	Fabricator
	Welder
	Brickmason
	Plumber
	Painter

HOSPITALITY & RECREATION	
Food Service	Waiter
	Chef/Cook
	Hostess
	Dishwasher
	Bus Boy
	Bartender
Hotel and Lodging	Desk Clerk
	Bellhop
	Hotel Manager
	Doorman
	Elevator Operator
Sports and Athletics	Referee
	Coach
	Bait Grower
	Lifeguard
Travel	Travel Agent
	Tour Conductor

MARKETING & DISTRIBUTION	
Advertising	Copywriter
	Media Director
	Commercial Artist
	Layout Person
Sales	Salesperson
	Counter Worker
	Delivery Person
Merchandising	Purchasing Agent
	Display Artist
	Fashion Designer
	Model
Finance	Insurance Agent
	Stock Broker
	Bank Teller
	Loan Officer
Warehousing	Shipping Clerk
	Loader
	Inventory Control Person

FINE ARTS	
Art	Painter (oil,mural,etc.)
	Painting Restorer
	Sculptor
	Cartoonist
	Art Appraiser
Drama	Stage Director
	Actor
	Drama Coach
	Dramatic Reader
	Drama Teacher
Dance	Choreographer
	Dance Instructor
	Ballet Dancer
	Chorus Dancer
Music	Musical Entertainer
	Choir Master
	Arranger
	Composer

ENVIRONMENTAL CONTROL	
Conservation	Soil Conservationist
	Forest Fire Fighter
	Fire Crewman
	Forest Aid
	Game Warden
Inspection	Air Analyst
	Sanitation Inspector
	Radiation Monitor
	Ind. Waste Inspector
Meteorology	Climatologist
	Meteorologist
	Weather Clerk
Sanitation	Sanitation Engineer
	Sewage Disposal Engineer
	Water Plant Worker

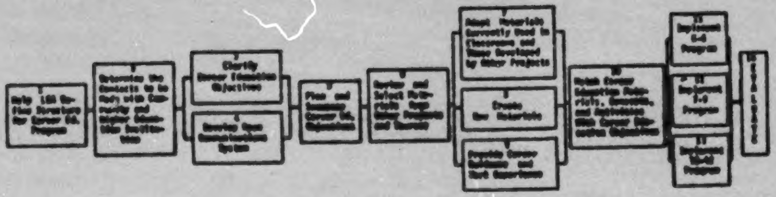
CONSUMER & HOMEMAKING	
Child Care	Elementary Teacher
	Teacher's Aide
	Day Care Center Worker
	Kindergarten Employee
	Professional Babysitter
Housing	House Manager
	Home Economist
	Interior Decorator
	Home & Equip. Consultant
Clothing & Textiles	Dressmaker
	Tailor
	Seamstress
	Laundry Worker
Food & Nutrition	Dietician
	Test Kitchen Worker
	Nutrition Consultant

PUBLIC SERVICE	
Courts & Corrections	Probation Officer
	Security Guard
	Lawyer
	Judge
	Court Recorder
Police & Fire	Police Officer
	Fire Fighter
	Sheriff
	Dispatcher
Defense	Civil Defense Worker
	Soldier
	Sailor
Education	Teacher
	College Professor
	Teacher's Aide
	Educational Consultant

MANUFACTURING	
Production	Foundryman
	Assembler
	Millwright
	Machinist
	Power Truck Operator
Research & Development	Designer
	Draftsman
	Patternmaker
	Programmer
	Systems Analyst
Engineering	Ceramics Engineer
	Industrial Engineer
	Chemical Engineer
	Metallurgy Engineer
	Mining Engineer

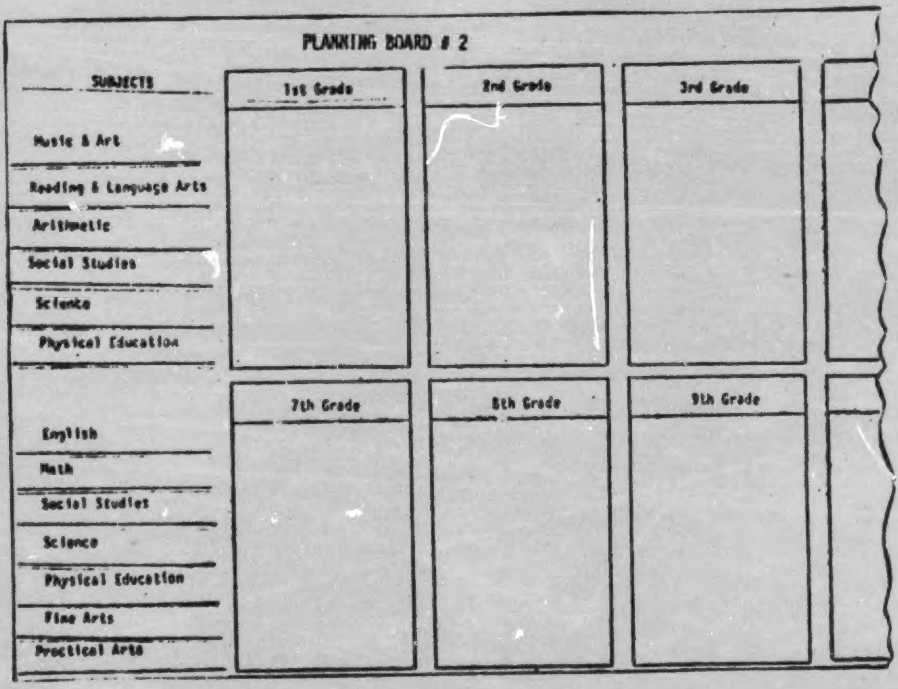
FIGURE 9

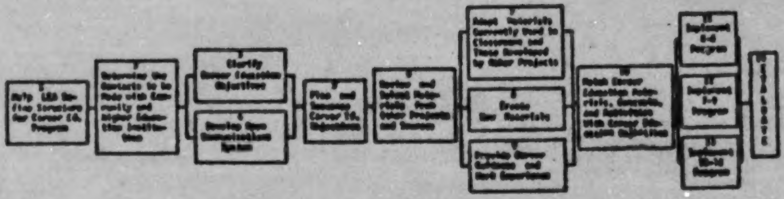
Master List of Careers to be Explored


Clarify Career Education Objectives
Adopt Materials Currently Used in Classrooms and Those Developed by Other Projects
Create New Materials

sequence the careers in the curriculum. This is done by moving the cards on which occupations are written from planning board # 1 to planning board # 2 as described on the following page.

Planning Board # 2: Sequencing the Careers to be Explored. Across the top of planning board # 2 are listed the grade levels in which career information is to be presented, and down the left-hand side are the subjects that are taught at these grade levels. The illustration below is an example of how the planning board might look at this stage:




Clarify Career Education Objectives
Adapt Materials Currently Used in Classrooms and Those Developed by Other Projects
Create New Materials
Provide Career Guidance and Work Experience

The sequencing task is now simply a matter of moving the names of occupations from planning board # 1 to planning board # 2, placing the occupations under the courses and grade levels according to the approach the local educational agency wishes to adopt for presenting career information. Several approaches to sequencing that the local educational agency might use are discussed in the paragraphs which follow.

The Strata Approach. One approach that the local educational agency might use to sequence career information in the curriculum is the strata approach shown in Figure 10 on the next page. Under the strata approach, each occupational cluster is assigned to a specific course and the various occupations within the cluster are explored at different grade levels. For example, the fine arts cluster (top stratum shown in Figure 10) might be assigned to the music and art courses, with dance-related occupations being explored in the first and ninth grades; music-related occupations explored in the second and sixth grades; drama-related occupations explored in the third and tenth grades; and so forth.

To continue the example, the communications cluster (second stratum) and the business and office cluster (third stratum) might be assigned to reading, language arts, and English courses. The manufacturing cluster (fourth stratum) and the marketing and distribution cluster (fifth stratum) might be assigned to arithmetic and math courses; the public service cluster (sixth stratum) might be assigned to social studies; and so forth.

PLANNING BOARD # 2

ONE APPROACH TO CAREER EXPLORATION:

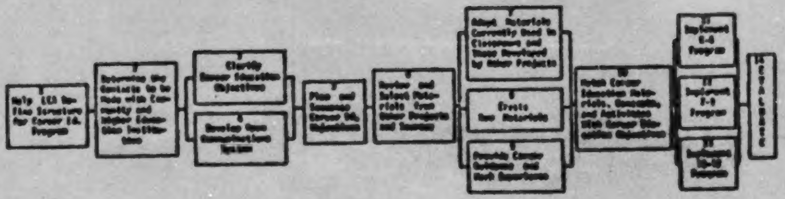
ASSIGNING STUDY OF EACH JOB CLUSTER TO A SPECIFIC COURSE

SUBJECTS	1st Grade		2nd Grade		3rd Grade	
Music & Art	DANCE	Ballet Dancer Chorus Dancer Choreographer	MUSIC	Musical Entertainer Choir Master Composer	DRAMA	Stage Director Actor Drama Coach
Reading & Language Arts	RADIO & TV BUSINESS & OFFICE	Announcer Weather Reporter Secretary Office Worker	PUBLISHING BUSINESS & OFFICE	Reporter Columnist Receptionist Manager	RADIO & TV BUSINESS & OFFICE	Comedian Director Banker Cashier
Arithmetic	PRODUCTION SALES	Assembler Stockman Cashier Salesman	ENGINEERING SALES	Ceramics Engineer Industrial Engineer Routeman Real Estate Broker	MANUFACTURING BANK	Millwright Patternmaker Bank Teller Loan Officer
Social Studies	POLICE & FIRE	Police Officer Fire Fighter Sheriff	DEFENSE	Civil Defense Worker Soldier Sailor	COURTS & CORRECTIONS	Lawyer Judge Court Recorder
Science	CONSERVATION	Forest Ranger Forest Aid Game Warden	SANITATION	Sanitation Engineer Sewage Disposal Engineer Water Plant Worker	HORTICULTURE	Nurseryman Horticulturist Groundkeeper
Physical Education	SPORTS	Referee Coach	RECREATION	Bait Grower Lifeguard	TRAVEL	Travel Agent Tour Conductor

	7th Grade		8th Grade		9th Grade	
Fine Arts	ART	Cartoonist Art Appraiser	ART	Sculptor Painter (oil,mural,etc.)	DANCE	Choreographer Dance Instructor
English	RADIO & TV BUSINESS & OFFICE	TV Actor Script Reader Legal Secretary Office Manager	BROADCASTING BUSINESS & OFFICE	Promotion Manager Scriptwriter Medical Secretary Typist	PUBLISHING BUSINESS & OFFICE	Proofreader Editor Accountant Stockbroker
Math	MANUFACTURER SALES	Designer Draftsman Salesperson Counter Worker	RESEARCH & DEVELOPMENT MERCHANDISING	Programmer Systems Analyst Purchasing Agent Display Artist	PRODUCTION WAREHOUSING	Machinist Power Truck Operator Loader Inventory ControlPerson
Social Studies	POLICE & FIRE	Dispatcher Probation Officer Security Guard	EDUCATION	Educational Consultant Teacher's Aide	EDUCATION	Teacher College Professor
Science	METEOROLOGY	Climatologist Meteorologist Weather Clerk	CONSERVATION	Soil Conservationist Forest Fire Fighter Fire Crewman	INSPECTION	Air Analyst Sanitation Inspector Radiation Monitor
Physical Education	PHYSICAL EDUCATION	Recreation Leader Umpire Coach	HEALTH	Dentist X-Ray Technician Dental Hygienist	HEALTH	Osteopath Medical Doctor Chiropractor
Practical Arts	HOUSING ARCHITECTURE	House Manager Home Economist Interior Decorator Landscape Architect Building Architect	CLOTHING & TEXTILES BUILDING TRADES	Dressmaker Tailor Laundry Worker Welder Brickmason [illegible]	CHILD CARE MACHINERY OPERATION	Elementary Teacher Teacher's Aide Day Care Center Worker Bulldozer Operator Hoist Operator

FIGURE 10

Strata Approach to Career Exploration



One advantage to the strata approach is that each teacher becomes an expert on one cluster of occupatons. Also, this approach is easy to explain to the school board and to community groups.

A disadvantage of this approach is that teachers may have difficulty in making their subject apply to all aspects of the occupation. Also, this approach fails to cause teachers to concern themselves with the contributions of their subject matter to all careers and all career concepts.

The Mosaic Approach. A second approach that the local educational agency might use to sequence career information in the curriculum is the mosaic approach shown in Figure 11 on the next page. Under the mosaic approach, any occupation might be assigned to any course. Central to this approach is the belief that most of the knowledges and skills taught in school can be related to many different occupations. For example, in Figure 11, note that in the English course such diverse occupations as secretary, actor, air analyst, media director, sheriff, travel agent, and so forth, might be explored. Similarly, in each of the other courses of studies a variety of occupations from each cluster might be explored. Specific examples of the way teachers can develop activities and materials to relate any subject matter to a variety of occupations are given later in this section.

Note also that the elementary grades in Figure 11 are devoted to developing general career concepts and that the sequencing of career information therefore begins with grade 7. Obviously, this is just one

PLANNING BOARD # 2

MOSAIC APPROACH TO CAREER EXPLORATION

SUBJECTS	1st Grade	2nd Grade	3rd Grade
Music & Art	DEVELOPING GENERAL CAREER CONCEPTS	DEVELOPING GENERAL CAREER CONCEPTS	DEVELOPING GENERAL CAREER CONCEPTS
Reading & Language Arts			
Arithmetic			
Social Studies			
Science			
Physical Education			

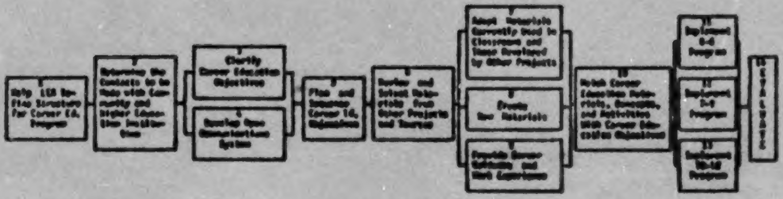
	7th Grade		
English	Secretary Manager	Actor Scriptwriter	Air Analyst Weather Clerk
Math	Tailor Home Economist	Salesperson Loan Officer	Assembler Stockman
Social Studies	Police Judge	Painter Cartoonist	Newsman Columnist
Science	Climatologist Meteorologist	Chemical Engineer	Surveyor Civil Engineer
Physical Education	Recreation Leader	Lifeguard Referee	Soldier Sailor
Fine Arts	Commercial Artist	Architect House Painter	Choreographer Dance Instructor
Practical Arts	Surveyor Contractor	Seamstress Test Kitchen Worker	Display Artist Layout Person

	8th Grade		
English	Media Director	Sheriff Teacher	Travel Agent Desk Clerk
Math	Plumber Fabricator	Office Worker Cashier	Doctor Chiropractor
Social Studies	House Manager	Radiation Monitor	Lawyer Court Recorder
Science	Hygienist X-Ray Technician	Weatherman Science Editor	Painting Restorer
Physical Education	Fire Crewman Game Warden	Day Care Center Worker	Tractor Operator Hoist Operator
Fine Arts	Fiction Editor	Oil Painter Sculptor	Ceramics Engineer
Practical Arts	Barber Dry Cleaner	Foundryman Millwright	Painting Restorer Art Appraiser

	9th Grade		
English	Investigative Officer	Copywriter Stockbroker	Attorney
Math	Tax Accountant	Art Appraiser	Dietician Chef
Social Studies	Insurance Agent	Conservationist Water Plant Worker	Tour Conductor Lecturer
Science	Metallurgy Engineer	Nutrition Consultant	Soil Conservationist
Physical Education	Ranger Forest Aide	Dancer Dance Instructor	Umpire Coach
Fine Arts	Interior Decorator	Fashion Designer	Actor Drama Coach
Practical Arts	Machinist Draftsman	Dietician Home Consultant	Air Analyst Sanitation Engineer

FIGURE 11

Mosaic Approach to Career Education

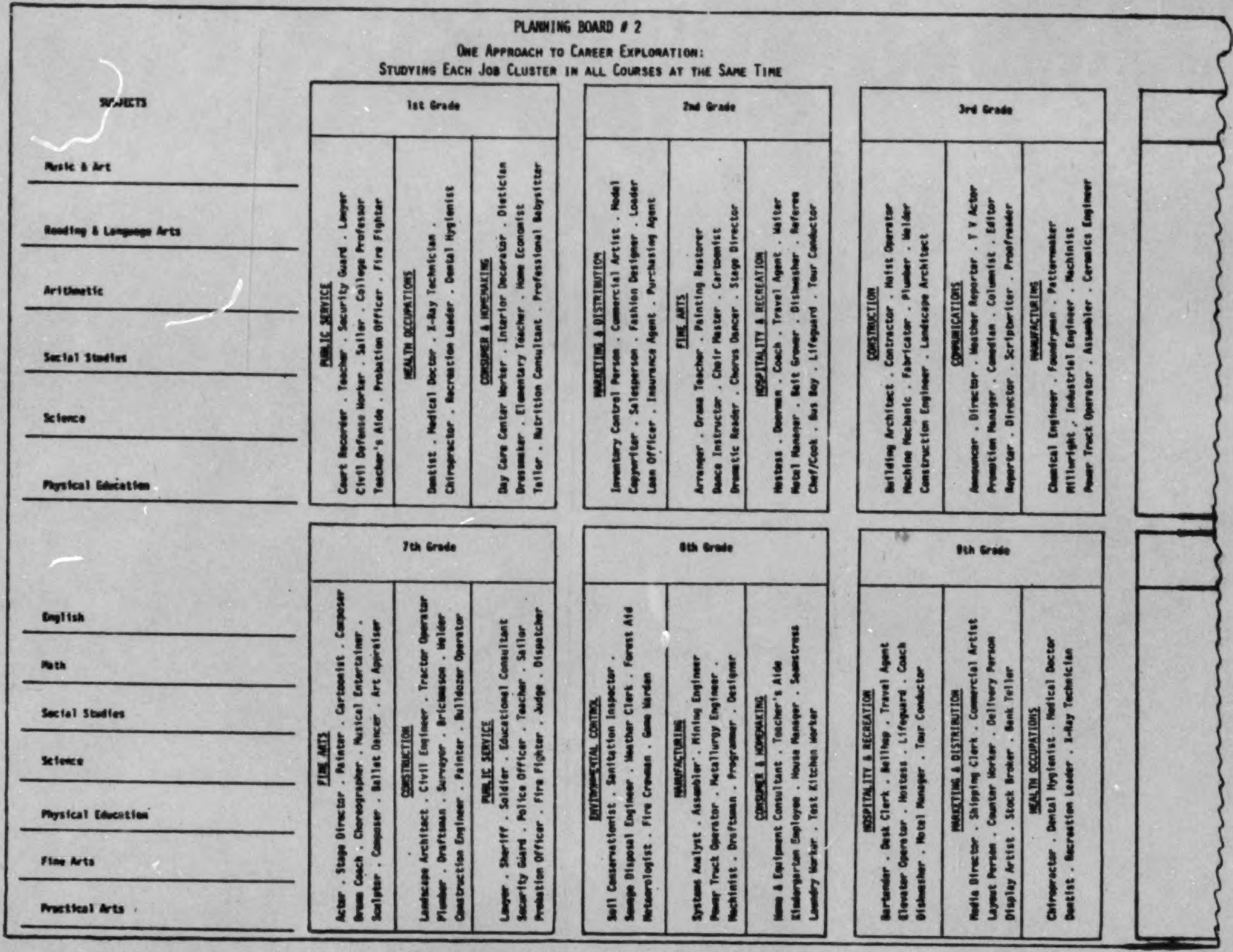


example of the mosaic approach. The sequencing of career information could just as well begin with the elementary grades if the local educational agency so wishes.

A major advantage of the mosaic approach is that it causes teachers to search for applications of their subject matter to careers of all kinds, as well as for personal and social life applications.

The disadvantages of this approach are that it may be difficult to explain to school board and community members and it requires that teachers learn about a large variety of occupations.

The Vertical Approach. Still another approach to sequencing career information in the curriculum is the vertical approach shown in Figure 12 on the next page. Under the vertical approach, students in all courses explore the same occupations or same cluster of occupations at the same time. For example, look at the first vertical column in the 7th grade block in Figure 12 and note that all students are exploring occupations in the fine arts cluster at the same time. In this example, students in English might be exploring the occupation of an actor from the point of view of speech and diction, students in math might be looking at the financial responsibilities of an art appraiser, students in social studies might be looking at the occupation of cartoonist and exploring the way in which cartoonists influence people and institutions through their cartoons. Students in science might explore the occupation of portrait painter and examine the painter's need to know human anatomy, and so forth.



PLANNING BOARD # 2

ONE APPROACH TO CAREER EXPLORATION:
STUDYING EACH JOB CLUSTER IN ALL COURSES AT THE SAME TIME

SUBJECTS

- Music & Art
- Reading & Language Arts
- Arithmetic
- Social Studies
- Science
- Physical Education

1st Grade

PUBLIC SERVICE
Court Recorder . Teacher . Security Guard . Lawyer
Civil Defense Worker . Sailor . College Professor
Teacher's Aide . Probation Officer . Fire Fighter

HEALTH OCCUPATIONS
Dentist . Medical Doctor . X-Ray Technician .
Chiropractor . Recreation Leader . Dental Hygienist

CONSUMER & HOMEMAKING
Day Care Center Worker . Interior Decorator . Dietician
Dressmaker . Elementary Teacher . Home Economist
Tailor . Nutrition Consultant . Professional Babysitter

2nd Grade

MARKETING & DISTRIBUTION
Inventory Control Person . Commercial Artist . Model
Copywriter . Salesperson . Fashion Designer . Loader
Loan Officer . Insurance Agent . Purchasing Agent

FINE ARTS
Arranger . Drama Teacher . Painting Restorer
Dance Instructor . Choir Master . Cartoonist
Dramatic Reader . Chorus Dancer . Stage Director

HOSPITALITY & RECREATION
Hostess . Doorman . Coach . Travel Agent . Waiter
Motel Manager . Bait Grower . Dishwasher . Referee
Chef/Cook . Bus Boy . Lifeguard . Tour Conductor

3rd Grade

CONSTRUCTION
Building Architect . Contractor . Hoist Operator
Machine Mechanic . Fabricator . Plumber . Welder
Construction Engineer . Landscape Architect

COMMUNICATIONS
Announcer . Director . Weather Reporter . T V Actor
Promotion Manager . Comedian . Columnist . Editor
Reporter . Director . Scriptwriter . Proofreader

MANUFACTURING
Chemical Engineer . Foundryman . Patternmaker
Millwright . Industrial Engineer . Machinist
Power Truck Operator . Assembler . Ceramics Engineer

- English
- Math
- Social Studies
- Science
- Physical Education
- Fine Arts
- Practical Arts

7th Grade

FINE ARTS
Actor . Stage Director . Painter . Cartoonist . Composer
Drama Coach . Choreographer . Musical Entertainer .
Sculptor . Composer . Ballet Dancer . Art Appraiser

CONSTRUCTION
Landscape Architect . Civil Engineer . Tractor Operator
Plumber . Draftsman . Surveyor . Brickmason . Welder
Construction Engineer . Painter . Bulldozer Operator

PUBLIC SERVICE
Lawyer . Sheriff . Soldier . Educational Consultant
Security Guard . Police Officer . Teacher . Sailor
Probation Officer . Fire Fighter . Judge . Dispatcher

8th Grade

ENVIRONMENTAL CONTROL
Soil Conservationist . Sanitation Inspector .
Sewage Disposal Engineer . Weather Clerk . Forest Aid
Meteorologist . Fire Crewman . Game Warden

MANUFACTURING
Systems Analyst . Assembler' . Mining Engineer
Power Truck Operator . Metallurgy Engineer .
Machinist . Draftsman . Programmer . Designer

CONSUMER & HOMEMAKING
Home & Equipment Consultant . Teacher's Aide
Kindergarten Employee . House Manager . Seamstress
Laundry Worker . Test Kitchen Worker

9th Grade

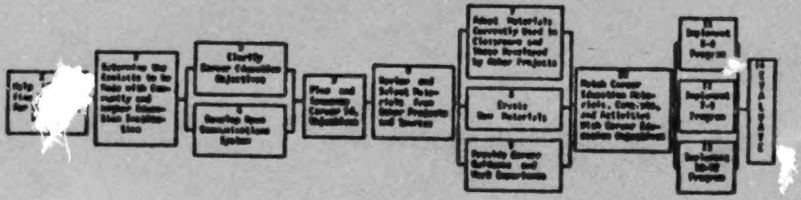
HOSPITALITY & RECREATION
Bartender . Desk Clerk . Bellhop . Travel Agent
Elevator Operator . Hostess . Lifeguard . Coach
Dishwasher . Motel Manager . Tour Conductor

MARKETING & DISTRIBUTION
Media Director . Shipping Clerk . Commercial Artist
Layout Person . Counter Worker . Delivery Person
Display Artist . Stock Broker . Bank Teller

HEALTH OCCUPATIONS
Chiropractor . Dental Hygienist . Medical Doctor
Dentist . Recreation Leader . X-Ray Technician

FIGURE 12

Vertical Approach to Career Exploration



One advantage to this approach is that it causes teachers to coordinate their efforts and to interact concerning common aspects of careers and career clusters. The vertical approach also provides an opportunity for students to study a great variety of occupations within a cluster.

A disadvantage of this approach is that it may require a great deal of time to coordinate. Also, students who are not interested in any career in the cluster being studied at a particular time may become bored.

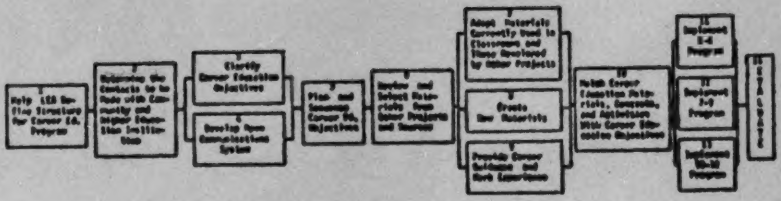
Other Approaches Possible. The foregoing are only three examples of approaches that might be used in sequencing career information into the curriculum. Many other approaches could be developed through the use of the career education planning board.

Review and Select Materials from Other Projects and Sources (Cell 6)

The LEA Satellite Coordinator will screen CE materials and projects and alert the Curriculum Coordinator of the CCC Staff to materials found locally that should be shared with other LEA's. The LEA Coordinator will contribute relevant items to the LEA Newsletter.

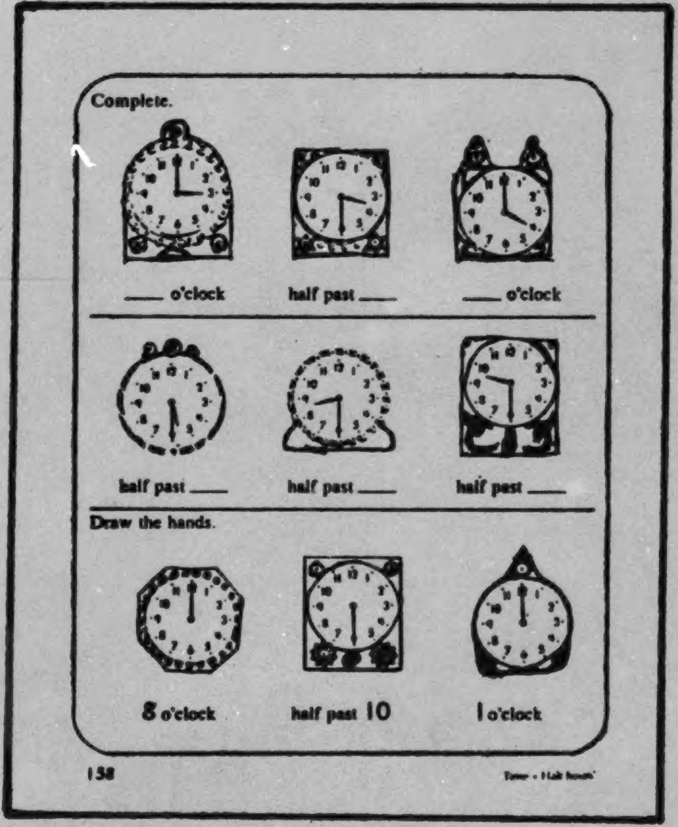
Help Teachers Adapt Presently-Used Materials (Cell 7)

After teachers have reviewed materials available from career education projects, commercial publishers, and other sources, they will also


Clarify Career Education Objectives
Develop Open Communications System
Plan and Sequence Career Ed. Objectives
Review and Select Materials from Other Projects and Sources
Adapt Materials Currently Used in Classrooms and Those Developed by Other Projects
Create New Materials
Provide Career Guidance and Work Experience
Match Career Education Materials, Concepts, and Activities With Career Education Objectives
Implement K-6 Program
Implement 7-9 Program
Implement 10-12 Program

be shown how to develop career education concepts by using their current textbooks and materials. A training manual has been developed in the BO-CEC National Project especially for this purpose and will be used as appropriate during the in-service training sessions.

One example of the way in which presently-used textbooks can be used as a springboard to career awareness and career exploration activities can be illustrated by the following page from a second-grade mathematics book:



Complete.

____ o'clock half past ____ ____ o'clock

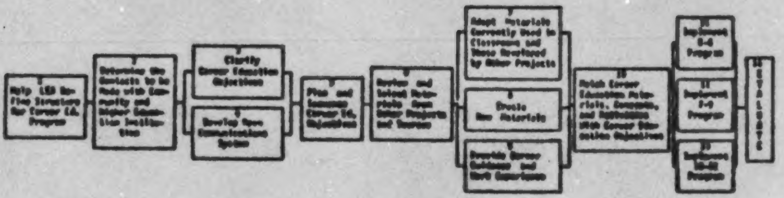
half past ____ half past ____ half past ____

Draw the hands.

8 o'clock half past 10 1 o'clock

138 Time • Half hours

Mathematics for Individual Achievement (Level 2), Richard A. Denholm, Copyright 1974, Houghton Mifflin Company. Used with permission.

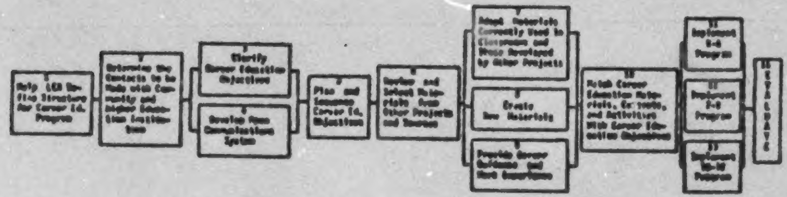

Clarify Career Education Objectives
Develop Open Communications System
Adapt Materials Currently Used in Classrooms and Those Developed by Other Projects
Create New Materials
Provide Career Guidance and Work Experience
EVALUATE

After students complete the "clock" exercises shown in the illustration on the previous page, the teacher might ask questions similar to the following to help youngsters develop some basic career concepts and work values.

1. Can you name some workers who use a clock? Why do these workers need to know how to tell time?
2. Some workers must push a button on a clock when they come to work. If a worker arrived at 8:30 in the morning when he or she is supposed to arrive at 8:00, what do you think would happen?

The second grade teacher might use the same "clock" exercises as a springboard to career awareness activities. For example, after the students complete the "clock exercises, the teacher might:

1. have the children role play the work of a nurse or doctor. The teacher would then create health-related applications for the use of telling time; for example, the teacher might show each child how one rotation of the second hand equals one minute and then have each child count how many times their heart beats per minute.
2. show pictures of policemen performing different tasks and for each task show a clock face set on a half hour. The teacher would then explain that it is very important for police to record exactly when different incidents happen. The children then pretend that they are police and record the time.
3. explain that time is very important to a secretary because people make appointments to see the boss, and the secretary must record these appointments. The teacher writes a list of appointments on the chalkboard (e.g., Mr. Brown--10:30; Miss Evans--9:30; Mr. Miller--10:00; Mrs. Young--2:30; etc.) and asks the children to put the names of the people in the order that they will come for their appointments.



Many examples similar to the one described above are provided in the training manual so teachers will begin to get a "feel" for the way in which they can use their current texts as a springboard for career awareness and career development activities.

During the in-service training sessions, LEA Satellite Coordinators will help teachers to identify and to adapt the portions of their course materials that can be used to develop career concepts.

Help Teachers Create New Materials (Cell 8)

Teachers will be shown how to develop units which reflect the following programmatic assumption:

> "Relationships between education and work can be made more meaningful to students through infusion into subject matter than if taught as a separate body of knowledge."[1]

The ACE approach to career education provides for the exploration of occupations in each of the 15 USOE cluster designations as students acquire, reinforce, and refine skills in general academic studies such as English, math, social studies, and science.

To assist teachers in local school districts who wish to develop materials which will provide students with the necessary intellectual

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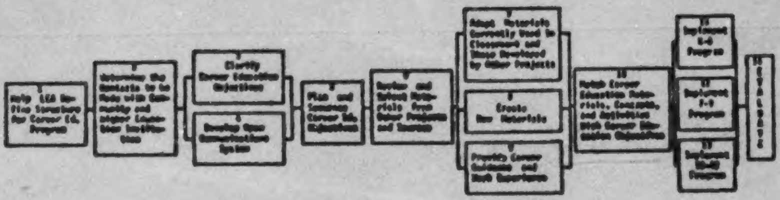
[1] An Introduction to Career Education, a policy paper of the U.S. Office of Education, U.S. Department of Health, Education, and Welfare, 1975), p. 7.


Clarify Career Education Objectives
Adapt Materials Currently Used in Classrooms and Those Developed by Other Projects
Create New Materials

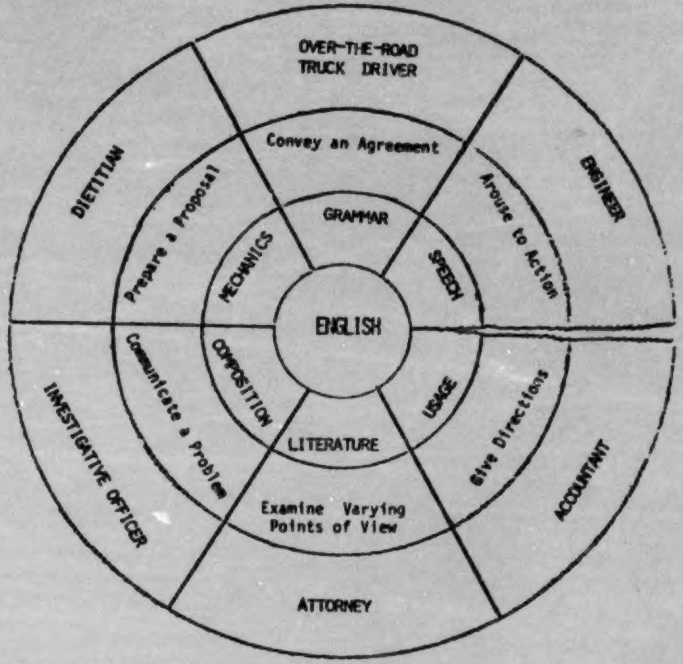
base from which to assess career options and from which to make tentative career choices, workshops will be held to accomplish the following objectives:

1. Teachers will learn how students can be introduced to occupations in any job cluster as they reinforce and refine skills in any academic area.
2. Teachers will learn how students can be introduced to occupations in any job cluster as they acquire basic skills in academic area.
3. Teachers will acquire expertise in developing study units which will emphasize the practical applications of general academic education.

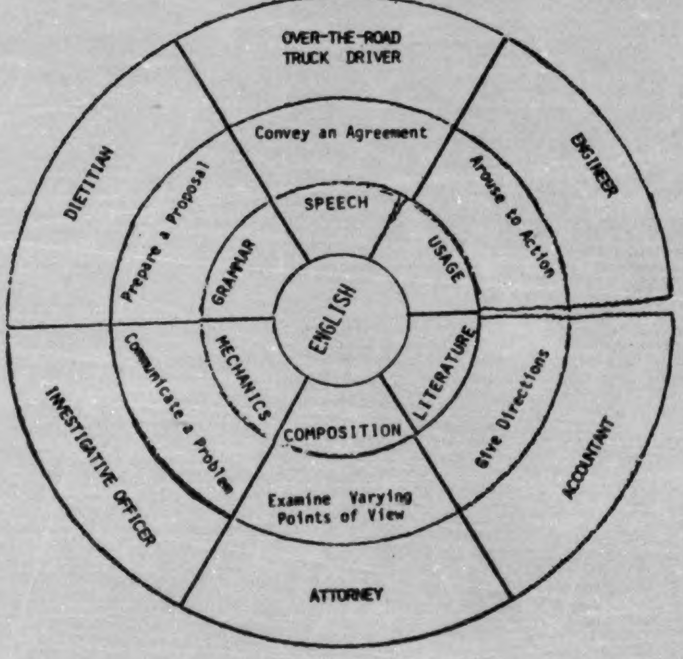
These three workshop objectives are illustrated by the "wheels" in the figures on the pages which follow. (Broken wheels are meant to indicate that the listings of courses, skills, skill applications, and occupations are incomplete. Many others may be added.)

Figure 13 graphically represents the way Objective 1 may apply to English teachers. As indicated in the color-highlighted sections of the two wheels, students may be introduced to the occupation of attorney through both literature and composition.

As pictured in Part A of Figure 13, students can be introduced to the career of attorney as they develop skills in reading, analyzing, and discussing stories and articles (selected from basic texts and supplementary reading materials) which are concerned with people in the legal professions. In Part B of Figure 13, the "rotation" of the inner bank of the wheel to the right illustrates the point that students can be encouraged to examine



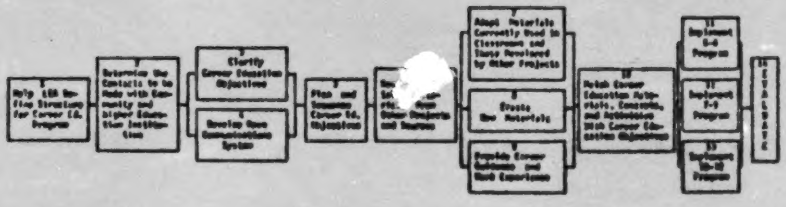
Part A



Part B

FIGURE 13

One Model For Infusing Career Education In English


Help LEA Define Structure for Career Ed. Program
Determine the Contacts to be Made with Community and Higher Education Institutions
Clarify Career Education Objectives
Develop Open Communications System
Plan and Sequence Career Ed. Objectives
Other Subjects and Teachers
Adapt Materials Currently Used in Classroom and Those Developed by Other Projects
Create New Materials
Provide Career Guidance and Work Experience
Match Career Education Aspects, Concepts, and Activities With Career Education Objectives
Implement K-6 Program
Implement 7-9 Program
Implement 10-12 Program
EVALUATE

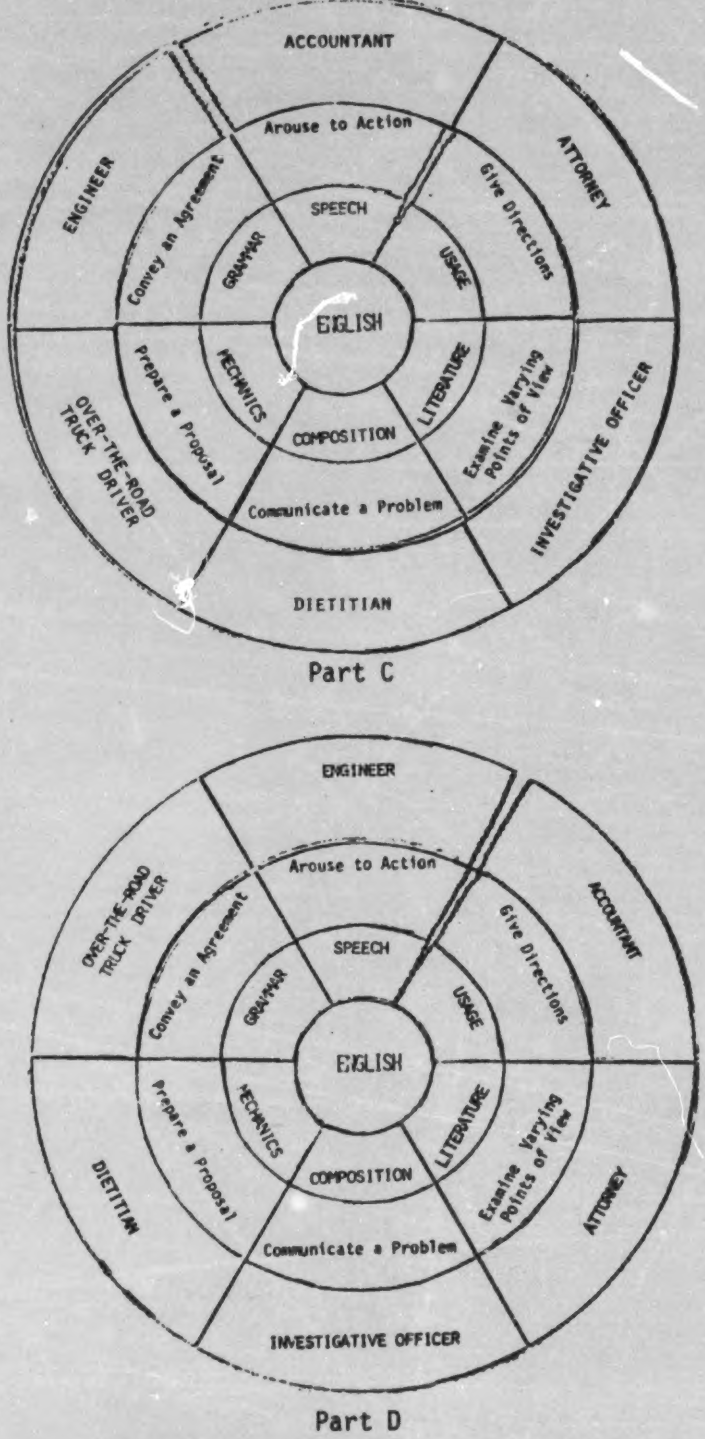
or study various aspects of the occupation of attorney while developing composition skills.

Figure 14, on the following page, illustrates that composition skills may be reinforced by studying facets of dietitian and investigative officer occupations.

Figure 15, a graphic representation of Objective 3, shows an important aspect of the ACE infusion plan. For schools that need teacher and student materials which will facilitate bridging the gap between academic and vocational education, ACE units can be prepared. For example, a teacher may learn about an Investigative Officer's job by reading pertinent occupational literature and by interviewing a person holding this position. Then, that teacher may prepare a simulation or student activity sheets which will provide students with an opportunity to (a) read about this occupation and (b) perform tasks which are typical of those required of an Investigative Officer and which will involve an immediate application of newly acquired skills.

A typical ACE unit which teachers may prepare will include:

1. Introductory pages listing the Unit Purpose, Before and After Class Procedures, and any Optional Activities
2. Keys to student activities
3. Student activity sheets for the completion of job tasks.



Part C

Part D

FIGURE 14

One Model For Infusing Career Education in English (con't)

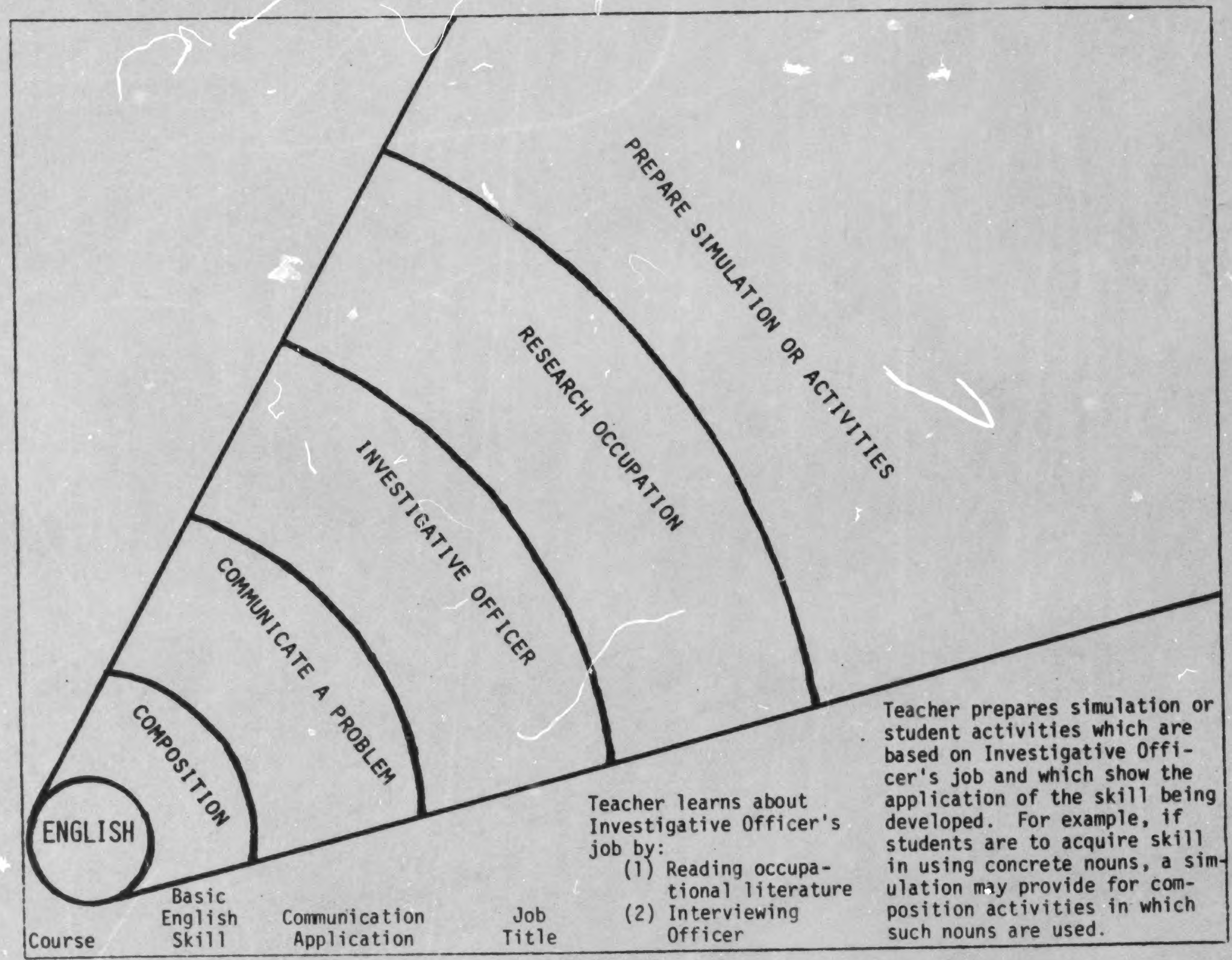
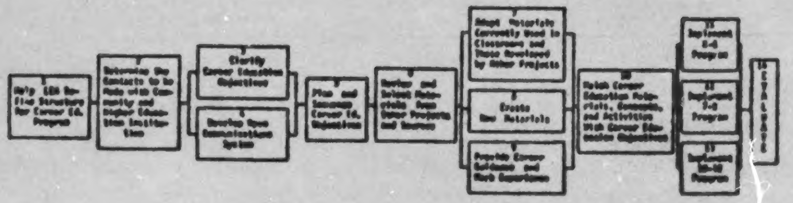

ENGLISH
COMPOSITION
COMMUNICATE A PROBLEM
INVESTIGATIVE OFFICER
RESEARCH OCCUPATION
PREPARE SIMULATION OR ACTIVITIES
Course
Basic English Skill
Communication Application
Job Title
Teacher learns about Investigative Officer's job by:
(1) Reading occupational literature
(2) Interviewing Officer
Teacher prepares simulation or student activities which are based on Investigative Officer's job and which show the application of the skill being developed. For example, if students are to acquire skill in using concrete nouns, a simulation may provide for composition activities in which such nouns are used.

FIGURE 15

The ACE Model For Preparing Career Education Activities


1 Help LEA Define Structure for Career Ed. Program
2 Determine the Contacts to be Made with Community and Higher Education Institutions
3 Clarify Career Education Objectives
4 Develop Open Communications System
5 Plan and Sequence Career Ed. Objectives
6 Review and Select Materials from Other Projects and Sources
7 Adapt Materials Currently Used in Classrooms and Those Developed by Other Projects
8 Create New Materials
9 Provide Career Guidance and Work Experiences
10 Match Career Education Materials, Concepts, and Activities With Career Education Objectives
11 Implement K-6 Program
12 Implement 7-9 Program
13 Implement 10-12 Program
14 EVALUATE

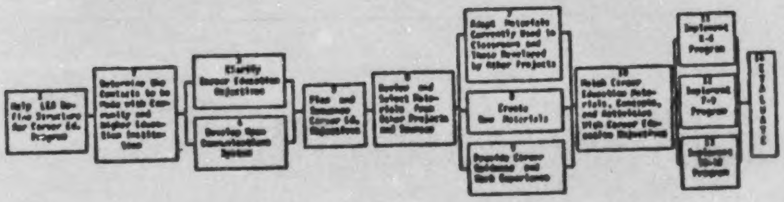
4. A student activity sheet which will provide for some decision-making and self-assessment as to interests, abilities, work values, and attitudes.

Graphic representations of how the three objectives listed previously may apply to teachers of math and social studies and a sample ACE unit are included in Appendices D and E.

Help Teachers Institute Career Decision-Making Programs Based on School and Work Experiences (Cell 9)

Another function of in-service training programs will be to show the LEA staff, school board, and school patrons how to establish or improve their career decision-making program. Functional and valid career decision-making programs grow out of a total educational effort to develop decision-making skills of all kinds. All such skills become functional when they are tied to experiences that cause decisions to be made. Career decision-making should grow out of daily class and guidance activities and various types of work experience. Each of these will now be discussed.

Guidance Activity Program. A number of models are already available and are being operationalized in school settings. Two of these developed by (1) the Appalachia Educational Laboratory, Inc., and (2) the state of Oregon Employment Division are being implemented in the


1
Help LEA Define Structure for Career Ed. Program
2
Determine the Contacts to be Made with Community and Higher Education Institutions
3
Clarify Career Education Objectives
4
Develop Open Communications System
5
Plan and Sequence Career Ed. Objectives
6
Review and Select Materials from Other Projects and Sources
7
Adapt Materials Currently Used in Classrooms and Those Developed by Other Projects
8
Create New Materials
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10
Match Career Education Materials, Concepts, and Activities With Career Education Objectives
11
Implement K-6 Program
12
Implement 7-9 Program
13
Implement 10-12 Program
14
EVALUATE

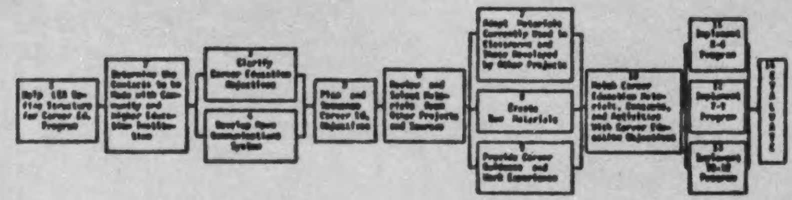
Fremont Unified School District (FUSD) under the direction of James Mayo, Career Education Director. The FUSD has a living laboratory in which these systems are operating and thus provides a training ground for the Satellite Coordinators so that they can communicate the processes to LEA's in their regions.

Briefly described, the Career Decision-Making Program (Appalachia) contains 15 career exploration and decision-making units, which use a career information system. The system contains 114 keysort cards and various guides based on a revision of the Work Trait Group descriptions from Volume II of the D. O. T.

Also briefly described, SEARCH--Systems Exploration and Research for Career Help--(State of Oregon Employment Division) is as follows:

> SEARCH is a method of combining two of the United States Employment Service's assessment devices, the Interest Check List (ICL) and the General Aptitude Test Battery(GATB), into meaningful interpretation that allows the client (student/learner) to: (1) make rational, quality occupational decisions, (2) examine courses of action to attain goals, and (3) look at job requirements in terms of consequences to the individual relative to self-concept and the related life roles assumed.

Other parts of the system include (1) individual computer printouts for the student-client, (2) instruction in and application of Work Trait Groups (D. O. T., Volume II) with General Education Development (GED) and specific vocational preparation; and (3) opportunity for the student-client to analyze the printout in terms of his/her interests and aptitudes--the printout showing occupational aptitude patterns.


Help LEA Define Structure for Career Ed. Program
Determine the Contacts to be Made with Community and Higher Education Institutions
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Develop Open Communication System
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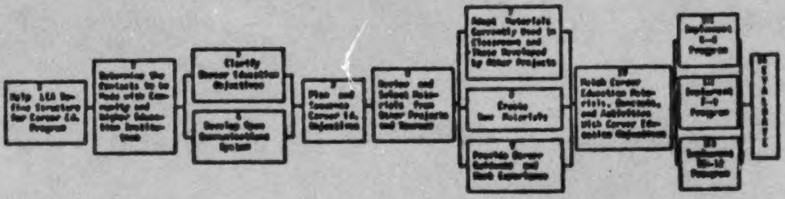
Review and Select Materials from Other Projects and Sources
Adopt Materials Currently Used in Classrooms and Those Developed by Other Projects
Create New Materials
Provide Career Guidance and Work Experience
Match Career Education Materials, Concepts, and Activities With Career Education Objectives
Implement K-6 Program
Implement 7-9 Program
Implement 10-12 Program
EVALUATE

Another system that can be considered by an LEA is the Minnesota Work Adjustment program which includes four instruments. Although the Minnesota program was developed for vocational rehabilitation, the theory behind it is applicable to some extent to K-12 instruction. Another system, VIEW, is used by Colorado schools, and has elements similar to that used by the Fremont Unified School District.

Work Experience Programs. Work experiences under the auspices of the school can lead to excellent opportunities to learn and practice decision-making. Three types of work experience will be considered. The first two are used with varying degrees of success over the nation. The third, although frequently proposed by educational leaders, has not been widely implemented. Each type of work experience will be discussed.

(1) Cluster-Based Work Experience and Internships. Cooperative Vocational programs and internships have been in operation for more than a half century. They are largely training programs for students strongly committed to a vocation or a profession. They still, however, provide continued opportunity for decision-making concerning a career.

(2) General Work Experience. General work experience programs have been introduced recently in schools, largely as a partial alternative to completion of a higher diploma and to prevent drop out. Some of these programs (as in the Fremont Unified School District) focus on vital decision-making experiences of youth who are immediately concerned with the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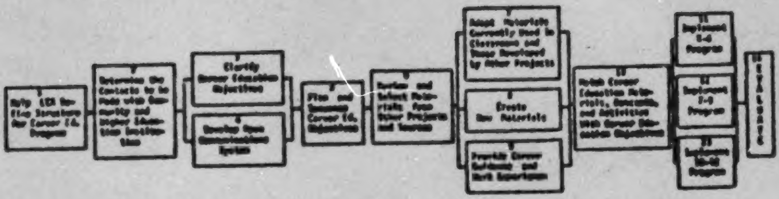
EVALUATE

value of school education in solving such problems as how to get a job, how to be "unaverage," how to advance on a job, how to leave a job, how to ask for a raise, and how to relate to supervisors and more experienced and older employees.

(3) Exploratory Work Experience. These programs (as in the FUSD) have been introduced so that students, with the help of teachers and counselors, can explore a career in much depth by spending 10-30 hours with a worker or professional in an occupation. A student interested in the legal profession would spend, by means of a planned program, 10-30 hours in an attorney's suite investigating the entire career. Whatever work is assigned would be completely subsidiary to the main purpose of observing the range of activities of the attorney and of talking with the attorney or attorneys. If another student wishes to own and operate a beauty parlor, a similar experience would be provided. Exploratory work experience must be planned as part of a total program and the interests of the student must be protected.

Match CE Materials, Concepts, and Activities With CE Objectives (Cell 10)

The LEA Satellite Coordinator will assist the LEA Staff in matching the materials and activities resulting from the processes described in Cells 7, 8, and 9 with the career education objectives clarified through



the process discussed in Cell 3. Choosing materials and activities to meet various defined objectives results in treatments to be given to selected populations. Hence, the LEA Satellite Coordinator will conduct in-service training for teachers to assist them in selecting and adapting (matching) materials and activities that will meet the CE objectives.

Implement K-6, 7-9, and 10-12 Programs (Cells 11, 12, and 13)

The LEA's will assist teachers in carrying out the instructional programs (treatments) identified in Cell 10. Some LEA's will focus on treatments at all grade levels, and others may focus on K-6, 7-9, 10-12, or a combination of these.

Evaluate (Cell 14)

The evaluation plan is discussed in Chapter 3 of this proposal.

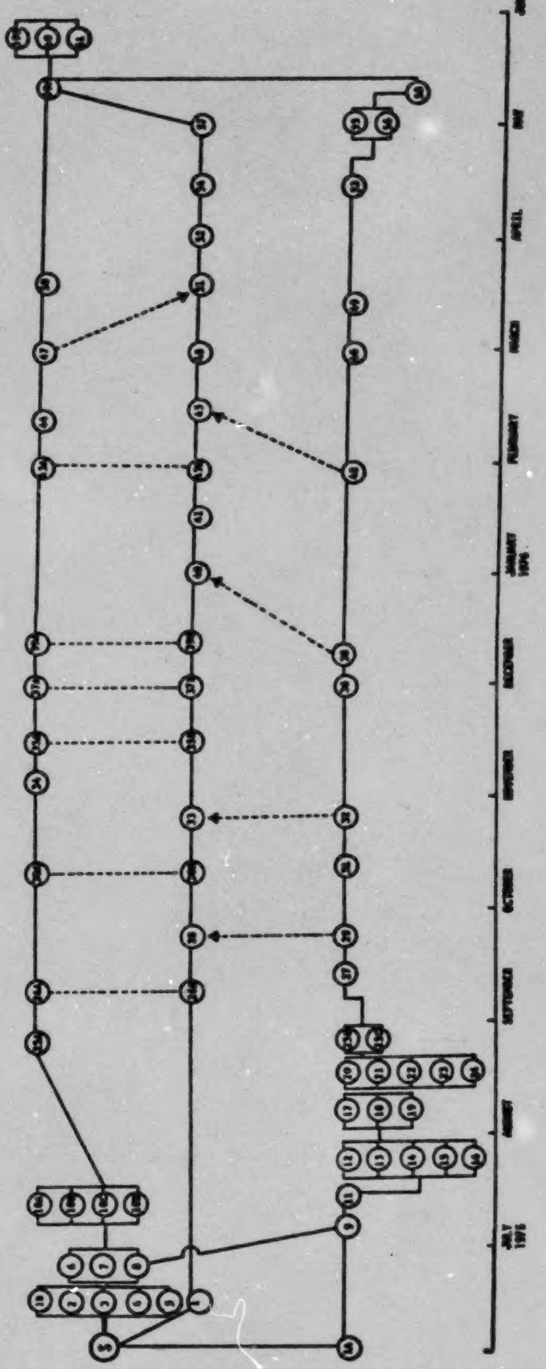
Schedule of Events

The project events are shown below and they are keyed by number to the "Flow Chart of the Schedule of Events" shown on the next page.

The events shown on the top line of the flow chart are Central Coordination Center (CCC) activities; those shown on the second line are communication activities (also performed by CCC); those shown on the third line are LEA Satellite Center activities. The bottom line shows the approximate completion date for each event.

(1A) Implement entire program and prepare for LEA Workshop through a series of communications
(1B) LEA Satellite Coordinator implements ACE Operational Model
(1C) Central Coordination Center (CCC) staff secures from Satellite Coordinators the finalized work statements and budgets for each LEA Satellite Center
(2) CCC Staff begins accumulating materials to expand existing library
(3) CCC Staff begins preparing and disseminating data cards describing materials that may be useful to LEA's
(4) CCC Staff prepares outline of ACE Program Model for use by Satellite Coordinators
(5) CCC Staff assigns parts of the outline to Satellite Coordinators for development of training plans consistent with the model
(6) CCC Staff established National Advisory Committee
(7) CCC Staff prepares first draft of ACE program model for use by Satellite Coordinators in the in-service training of LEA administrators, school, and community leaders
(8) CCC Staff sends first draft of ACE program model to Satellite Coordinators
(9) LEA Coordinators review guidelines and indicate their needs for the workshop in event 8
(10A) CCC Staff conducts workshop for Satellite Coordinators to review and revise training guidelines
(10B) Disseminate CE materials gathered from other funded projects
(10C) CCC Staff trains Satellite Coordinators in the evaluation process to be used at LEA level
(10D) CCC Staff trains Satellite Coordinators in the use of a slide-tape program for helping LEA's develop an open communication process
(11) LEA Satellite Coordinators meet with LEA representatives to present an overview of the ACE Project and to define the LEA's role and to plan CE activities
(12) LEA Coordinators fill in proposed treatment matrix to determine pre-test procedures for treatment, control, and comparison groups
(13) Satellite Center Coordinators help LEA's determine contacts to be made in community and establish local advisory councils
(14) Satellite Center Coordinators meet with LEA's to clarify CE program objectives
(15) Satellite Center Coordinators meet with LEA's to develop an open communication process for the LEA's
(16) Satellite Center Coordinators meet with LEA's to establish scope for local implementation of ACE career education activities in terms of grade levels, classes, and teachers to be involved
(17) Satellite Center Coordinators meet with LEA's to identify and sequence careers to be explored
(18) LEA's produce planning boards
(19) Satellite Center Coordinators send reports to CCC describing scope of ACE project in participating LEA's
(20) Satellite Center Coordinators screen CE materials
(21) Satellite Center Coordinators administer CE attitude/perception instruments to participating classroom teachers
(22) Satellite Center/cooperating universities institute in-service training programs for teachers
(23) Teachers administer pre-tests to treatment classes
(24) Teachers begin implementing CE instructional programs in their treatment classes
(25A) CCC Staff conducts workshop for Satellite Center Coordinators
(25B) Coordinators report on progress in the LEA Satellite Centers
(25C) LEA Coordinators review their evaluation matrices and project design
(26A) CCC Staff prepares summary of progress
(26B) CCC sends semi-monthly LEA Newsletter to Satellite Center Coordinators
(27) Teachers submit progress reports to Satellite Center Coordinators
(28) LEA Newsletter
(29) Satellite Center Coordinators summarize teacher reports and submit summary reports to CCC
(30A) Prepare summary report of Satellite progress
(30B) LEA Newsletter
(31) Teachers submit progress reports to Satellite Center Coordinators
(32) Satellite Center Coordinators summarize teacher reports and submit summary reports to CCC
(33) LEA Newsletter
(34) Offer to disseminate progress to AWA Convention groups
(35A) Complete first ERIC search and disseminate results through the LEA Newsletter
(35B)
(36) Complete first session of in-service training
(37A) Review other projects
(37B) Send LEA Newsletter
(38) Start second session of in-service training
(39A) Prepare revised draft of ACE Program model and disseminate through LEA Newsletter
(39B)
(40) Prepare and send LEA Newsletter
(41) Prepare and send LEA Newsletter
(42) LEA's submit revisions of ACE Program model
(43A) Complete second ERIC serach and disseminate through LEA Newsletter
(43B)
(44) Central Coordination Center Director completes site visits
(45) LEA Newsletter to Satellite Centers
(46) Complete second session of in-service training
(47) Central Coordination Center staff conducts workshop on final evaluation plans
(48) Prepare and send LEA Newsletter
(49) Start third in-service training program
(50) Offer to disseminate progress to AERA
(51) Prepare and send LEA Newsletter
(52) Prepare and send LEA Newsletter
(53) Administer post-test
(54) Prepare and send LEA Newsletter
(55) LEA's analyze pre/post-test data
(56) Complete third in-service training program
(57) Prepare and send LEA Newsletter
(58) Submit LEA summary reports of evaluation findings to Central Coordination Center
(59A) Assemble all reports, summaries, and communications
(59B) Complete final and tested Career Education program model
(60) Prepare final report and submit to USOE and ERIC
(61) Submit recommendations concerning further dissemination and refunding

FLOW CHART OF THE SCHEDULE OF EVENTS



PART III

EVALUATION

III. EVALUATION AND EXAMPLARY NATURE OF PROJECT

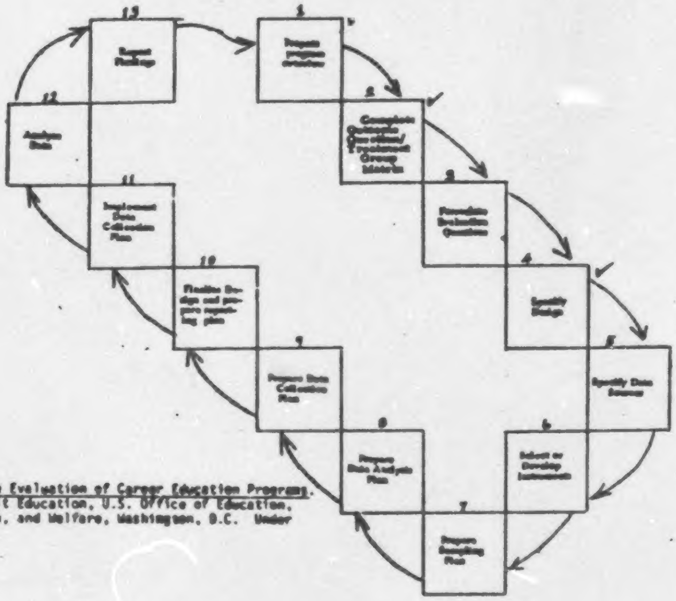
Evaluation

The evaluation plan described in this chapter will meet the LEA's need for a plan to assess the effectiveness of the local career education effort and will help meet the national need for hard data essential for future policy-making decisions. The evaluation plan discussed here is adapted from the Handbook for the Evaluation of Career Education Programs disseminated by the Bureau of Occupational and Adult Education, U.S. Office of Education.

The evaluation plan discussed below will be used in assessing:

1. student outcomes (which take into account incremental changes in students' academic skills, attitudes, career awareness, career information, etc., attributable to the treatment received in the CE program);
2. the effectiveness of the ACE model as an operational model for bringing about incremental changes in the career education program.

The evaluation process described in the Handbook will be followed in assessing incremental changes resulting from the proposed project. Basically, this process consists of the 13 steps shown below:



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Each LEA will be asked to appoint an evaluation team to be responsible for coordinating the above evaluation process at the local level, with consulting help provided by the Satellite coordinators. The 13 steps of the evaluation process are discussed below and on the following pages.

Prepare Program Overview and Identify What is to be Evaluated (Step 1)

As the first step in the evaluation process, each LEA will prepare a brief, clear statement that describes the purpose, activities, and resources of the CE program and that identifies participating groups. Using this background information, the evaluation team will work with the LEA career education director and others to specify the career education activities to be evaluated. This information will then be used to establish the parameters of the LEA evaluation plan and to prepare the evaluation matrices described below.

Prepare Evaluation Matrices (Step 2)

The second step in the evaluation plan is for each LEA to prepare two evaluation matrices which will form the basis for selecting the specific evaluation instruments and techniques to be used in evaluating student outcomes.

The First Matrix. The purpose of the first matrix is to show the levels of CE activities and to specify which student groups are participating in each specific type of career education activity. An example of the first matrix is shown in Figure 16. Note that this matrix is designed to show:

1. the levels of career education activities in the local school district (i.e., the grade levels--elementary, junior high, senior high--and the CE development levels--familiarization, orientation, exploration, preparation--of the local CE effort);

MATRIX NO. 1

TREATMENT/PARTICIPANTS/OBJECTIVES MATRIX

(1) ACTIVITY AREA	(2) SPECIFIC TREATMENTS (Career Education Activities)	(3) Participants*	(4) OBJECTIVES COVERED
Elementary School			
Familiarization	CE concept infusion using ACE Guide	Grades 3, 4, 5, and 6 at Silverton and Cole Elementary Schools. Grades 4, 5, and 6 at Schaffer Elementary Schools. Grades 5 and 6 at Dowd Elementary School.	I. II. III, IV,
	Field Trips (specified)		
Career Orientation	CE information infusion using ACE Guide		I, II, III, IV
	The It Kit		
Career Exploration	Mini-simulations	Ms. Simms' and Mr. Freeman's 6th grade classes at Dowd Elementary School.	I, II, III,
	Occupacs		
	Field trips		
Junior High School			
Familiarization	CE concept infusion using ACE Guide	Grades 7, 8, and 9 at Booker, and Mr. Trowbridge's classes at Cooley	
	CE information infusion using ACE Guide		
Career Orientation	Participation in Career Orientation Program at Resource Center	Same as above	
	Classroom visits by workers	Ms. Ramsey's	
Career Exploration	ACE Career Simulation (Academic Fusion) Units		
	"Big Brother/Sister" Activities (ACE)		
Work Experience	Exploratory on-the-job participation using ACE Guide		
Senior High School			
Orientation	Career Fair Classroom visits		
Exploration			
Work Experiences	-		
Placement (exiting students)			

FIGURE 16

2. the specific career education activities to be evaluated at each level.

3. the student groups involved in each type career education activity (i.e., the *specific schools* or *classes* involved in each activity); and

4. the broad career education objectives which the activities are designed to meet (e.g., increased self-awareness; increased academic skills, and other CE objectives established by the LEA).

This first matrix provides a concise summary of information needed to prepare a second matrix which will, when complete, show the specific instruments to be used in measuring student outcomes.

The Second Matrix. While the first matrix shows only the general CE objectives against which student outcomes are to be measured, the purpose of the second matrix (Figure 17) is to show the specific objectives (in the form of outcome questions) and the student groups exposed to treatments intended to meet each objective. Note in this matrix that the appropriate boxes beneath each treatment group are checked to show which specific outcome objectives each group is expected to achieve. Instruments that measure student outcomes in relation to each objective will be shown in the last column.[1] Thus, this completed matrix becomes a reference which shows the treatment groups, the objectives which each group is expected to meet, and the instruments to be used in assessing whether the objectives have been met.

The formulation of evaluation questions and specifications of the evaluation design (which are the third and fourth steps in the evaluation plan) are discussed next.

---

[1] The selection of evaluation instruments is discussed in a later section of this chapter.

MATRIX NO. 2

OUTCOME QUESTION/TREATMENT GROUP/INSTRUMENTATION MATRIX

Treatment Group / Outcome Questions	Silverton & Cole Grades 1,4,5,6	[illegible] Elem. Grades 3,4,5,6	Stan's 8th Grade Class (Dual)	Freeman's [illegible] Class (Dual)	[illegible] Jr. High [illegible]	[illegible]'s [illegible] Class	Instrumentation
I. Increased Self-Awareness A. Have students increased their ability to describe their own current abilities and limitations?	X	X	X	X	X	X	
B. Have students increased their ability to describe their own current interest and values?	X	X	X	X	X	X	
C. Do students display more positive attitudes toward themselves?	X	X	X	X	X	X	
D. Have students increased their recognition that social, economic, educational, and cultural forces influence their development?					X	X	
II. Increased Basic Academic/Vocational Skills A. Have students increased their level of generally useful numerical skills?			X	X	X		
B. Have students increased their level of generally useful communication skills?					X	X	

NOTE: The outcome questions should be prepared by the LEA based on specific objectives of the LEA career education program (see Chapter 2).

IX. Increased Awareness of Means for Continued Education A. Have students increased their ability to identify sources of additional education in major types of paid and unpaid work?							
B. Have students increased their ability to identify means to support additional education for themselves in major types of paid and unpaid work?							

FIGURE 17

Formulate Evaluation Questions and Specify Evaluation Design (Steps 3 and 4)

Evaluation Questions. The Satellite Coordinator will assist the LEA staff in formulating the evaluation questions to which answers will be sought in assessing student outcomes. The evaluation questions formulated will be compatible with the three questions set forth in the Handbook for Evaluation of Career Education Programs:

1. How do the experiences (treatments) for treatment and comparison students differ?
2. How do the outcomes (products) for treatment and comparison students differ?
3. How do the treatments relate to student outcomes (in instances in which there are outcome differences between treatment and comparison students)?

The purpose of these evaluation questions is to provide one basis for selecting an evaluation design.

The Evaluation Design. Where possible, a pre/post test, control group evaluation design will be used because it would provide the best data on incremental change in student outcomes resulting from the ACE career education program (i.e., the treatment). The pre- and post-test data will provide a measure of changes in students' knowledge, skills, and attitudes, and the treatment/control group data comparisons will provide a basis for assessing the amount of change that can be attributed to the effects of the treatment.

The traditional control group design may not be feasible in some situations, because classes with complete non-exposure to the treatment (control groups) may not be available. Therefore, a pre/post test comparison group design will be used in these situations. Using this design, classroom groups will be randomly selected and information will be obtained on the exposure each class has had to the CE program. The classes with the lowest exposure levels will be treated as a comparison group relative to those with the highest exposure level. Comparisons will be made between the gains of high-exposure groups and those of the low-exposure groups to assess impact of the treatment.

Specify Data Sources (Step 5). The Satellite Coordinator will help the LEA's specify sources from which the data needed to answer the evaluation questions will be obtained. Primary data on student outcomes will be obtained from students by administering

1. standardized instruments
2. commercially or institutionally prepared non-standardized instruments where standardized instruments do not exist
3. locally developed instruments where no adequate instruments exist to measure specific CE objectives.

Primary data concerning the administration, operation, and cost of the program will be obtained from LEA staff. The selection and development of data-collection instruments is discussed more fully in the next section of this chapter.

To supplement the primary data, secondary data will be obtained from such sources as student attendance records, interest inventory records, work-study placement records, and other existing school records.

Select or Develop Instruments (Step 6)

Instruments used in the LEA's existing academic testing program will be used to assess outcomes in terms of students' increased numerical, communication, and other academic competencies. (As explained in a preceding section, control or comparison groups will be used where possible so that changes attributable to the CE program can be ascertained.)

Instruments recommended by USOE for measuring other student outcomes of CE efforts will be used as appropriate for testing and evaluation. These instruments, which were reviewed by a special USOE panel during 1974, are shown in Figure 18. To prevent ambiguity in assessing student outcomes, preference will be given to those instruments with subtests that measure only one outcome each or which measure two outcomes that are clearly related to each other.

In addition to the instruments shown in Figure 18, tests or test series from the following list (Handbook, pp. 72-3) will also be considered and used as appropriate:

New Mexico Career Education Test Series. Monitor.

Orientation of Career Concepts. Evaluative Research Associates, Inc.

Affective Assessment Questionnaire. Minnesota Research Coordinating Unit for Vocational Education

Decision Making Scale. IBEX

PSE Career Education Test. Policy Studies in Education

Attitude Toward Self and Others Scale. Center for Occupational Education

Career Awareness Inventory. Cornell Institute for Research and Development in Occupational Education

J.V.M.-Scale. School District of the City of Royal Oak

Qualified LEA personnel, or a consortium of LEA and Satellite personnel, will develop the tests or instruments needed to measure outcomes not measured by instruments currently available to LEA's or by those discussed above. Where instruments must be developed locally, expertise of test and measurement experts at the local cooperating universities will be utilized.

FIGURE 18

INSTRUMENT LIST

Adapted from the *Handbook for the Evaluation of Career Education Programs*, Bureau of Occupational and Adult Education, U.S. Office of Education, Department of Health, Education, and Welfare, Washington, D.C. Under Contract No. OEC-0-73-6663.

Instruments Recommended by USOE Panel:

THE ASSESSMENT OF CAREER DEVELOPMENT (ACD). Instrument with five subscores. Published by Houghton Mifflin.

CAREER DEVELOPMENT INVENTORY (CDI). Instrument with three scales. Available from author, Donald E. Super, *et al.*, Teachers College, Columbia University, New York, N.Y., 10027 to be used with their permission.

CAREER EDUCATION QUESTIONNAIRE (CEQ). Each grade level test yields one overall score. Published by Minnesota Research Coordinating Unit for Vocational Education, University of Minnesota.

CAREER MATURITY INVENTORY (CMI). Instrument contains five post attitude scales. Published by CTB/McGraw Hill, Del Monte Research Park, Monterey, California.

DIFFERENTIAL APTITUDE TESTS WITH CAREER PLANNING PROGRAM (DAT). Published by The Psychological Corporation.

SELF OBSERVATION SCALES (SOS). Instrument with 13 subscales. Published by National Testing Service.

Outcomes measured by above instruments:

Outcome	Instrument	Remarks
Grades K - 3		
I C. Positive attitudes toward selves	SOS, Primary Level, scales 1, 2, and 4 combined	See Instrument List
IV A. Duties and abilities required	CEQ, Grade K-3	Test assesses IVA and IVB in combination
IV B. Work conditions	CEQ, Grade K-3	
VI F. Desire for continuous learning	SOS, Primary Level, scale 3	See Instrument List
Grades 4 - 6		
I C. Positive attitudes toward selves	SOS, Intermediate Level, scales 1, 2, 3, 4, and 7 combined	See Instrument List
IV A. Duties and abilities required	CEQ, Grade 4-6	Test assesses IV A, IV B, and [illegible] C in combination
IV B. Work conditions	CEQ, Grade 4-6	
IV C. Entry requirements	CEQ, Grade 4-6	
VI F. Desire for continuous learning	SOS, Intermediate Level, scale 5	See Instrument List
Grades 8 - 12		
I C. Positive attitudes toward selves	ACD, Unit 4, Items 37 and 38	------------------------------
I D. Recognition of forces influencing development	CDI, Scale C	Measures I D, IV A, IV C, V C, and V E in combination
III B. Positive attitudes toward work	CMI, Attitude Scale	Also applicable for Grade 7
IV A. Duties and abilities required	• ACD, subscore 1	Measures IV A and IV B in combination
	• ACD, subscore 3	Measures IV A and V B in combination
	• CDI, scale C	Measures I D, IV A, IV C, V C, and V E in combination
	• CMI, Part I	• Measures IV A, IV E, V A, V B, and V E in combination • Also applicable for Grade 7
	• CMI, Part 2	Also applicable for Grade 7
	• CEQ, Grade 7-9	• Measures IV A, IV B, IV C, IV D, V E, and VII A in combination • Applicable for Grades 7, 8, and 9 only

FIGURE 18 (continued)

Grades 8 - 12 -- cont.

Outcome	Instrument	Remarks
IV B. Work conditions	• ACD, subscore 1	Measures IV A and IV B in combination
	• CEQ, Grade 7-9	• Measures IV A, IV B, IV C, IV D, V E, and VII A in combination • Applicable for Grades 7, 8, and 9 only
IV C. Entry requirements	• ACD, subscore 2	----------------------------------
	• CDI, scale C	Measures I D, IV A, IV C, V C, and V E in combination
	• CMI, Part 4	Also applicable for Grade 7
	• CEQ, Grade 7-9	• Measures IV A, IV B, IV C, IV D, V E, and VII A in combination • Applicable for Grades 7, 8, and 9 only
IV D. Impact of social and technological change	• ACD, subscore 4	Measures IV D, V C, and V E in combination
	• CEQ, Grade 7 - 9	• Measures IV A, IV B, IV C, IV D, V E, and VII A in combination • Applicable for Grades 7, 8, and 9 only
IV E. Factors affecting success and satisfaction	CMI, Part 1	• Measures IV A, IV E, V A, V B, and V E in combination • Also applicable for Grade 7
V A. Relating own abilities to work possibilities	• CMI, Part 1*	• Measures IV A, IV E, V A, V B, and V E in combination • Also applicable for Grade 7
	• CMI, Part 3*	• Measures V A and V B in combination • Also applicable for Grade 7
	• DAT	• See Instrument List regarding scoring.
V B. Relating own interests and values to work possibilities	• ACD, subscore 3	Measures IV A and V B in combination
	• CMI, Part 1*	• Measures IV A, IV E, V A, V B, and V E in combination • Also applicable for Grade 7
	• CMI, Part 3*	• Measures V A and V B in combination • Also applicable for Grade 7
	• DAT	• See Instrument List regarding scoring.
V C. Awareness and use of information sources	• ACD, subscore 4	Measures IV D, V C, and V E in combination
	• ACD, subscore 5	Measures V C, V F, and VII A in combination
	• CDI, scale B	Measures V C, V F, and VII A in combination
	• CDI, scale C	Measures I D, IV A, IV C, V C, and V E in combination
V E. Steps and factors in career planning	• ACD, subscore 4	Measures IV D, V C, and V E in combination
	• CDI, scale A	Measures V E and V F in combination
	• CDI, scale C	Measures I D, IV A, IV C, V C, and V E in combination
	• CMI, Part 1	Measures IV A, IV E, V A, V B, and V E in combination
	• CEQ, Grade 7-9	• Measures IV A, IV B, IV C, IV D, V E, and VII A in combination • Applicable for Grades 7, 8, and 9 only
V F. Active involvement in career decision-making	• ACD, subscore 5	Measures V C, V F, and VII A in combination
	• CDI, scale A	Measures V E and V F in combination
	• CDI, scale B	Measures V C, V F, and VII A in combination
VII A. Awareness and use of information sources	• ACD, subscore 5	Measures V C, V F, and VII A in combination
	• CDI, scale B	Measures V C, V F, and VII A in combination
	• CEQ, Grade 7-9	• Measures IV A, IV B, IV C, IV D, V E, and VII A in combination • Applicable for Grades 7, 8, and 9 only

Prepare Sampling Plan (Step 7)

Generally, the treatment population will consist of intact classes. If feasible, all the treatment population will be tested. However, if this is not feasible, the Satellite Coordinators will work with the LEA evaluation team and a statistician to prepare a sampling plan. If sampling is required, a sample size consistent with that recommended in the Handbook for the Evaluation of Career Education Programs will be used.

Prepare Data Analysis Plan (Step 8)

Appropriate data analysis techniques will be specified for each LEA's evaluation plan. Both parametric and non-parametric techniques will be used in analyzing data, depending upon the randomness of the sample, the assumptions concerning the normality of the distribution from which the sample is drawn, and other pertinent factors. Some of the statistical techniques that might be appropriate are t-test, analysis of covariance, and analysis of variance (all parametric); and Mann-Whitney U test, Krushal-Wallis one-way analysis of variance, and chi-square test (all non-parametric). To determine the strength of relationship between treatment variables and outcome variables, the Pearson Product-Moment correlation (parametric) or Spearman Rank Order Correlation (non-parametric) will be used.

Prepare Data Collection Plan (Step 9)

The Satellite Coordinator will assist the LEA in developing a data collection plan that will include the following steps[1]:

1. Identify all tasks necessary to carrying out the data collection process

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[1] These steps are adapted from the Handbook for the Evaluation of Career Education Programs. Bureau of Occupational and Adult Education, U.S. Office of Education, Department of Health, Education, and Welfare, Washington, D.C. Under Contract No. OEC-0-73-6663.

2. setting realistic target dates for completing each task
3. identify skills needed to complete each task
4. identify personnel to carry out each data collection task
5. determine the training needed by data collection personnel; develop and implement a training plan to provide the needed training
6. evaluate the data collection plan and make any necessary changes before implementing the plan

Finalize Design and Prepare Reporting Plan (Step 10)

Once the preceding nine steps of the evaluation plan have been completed, the total evaluation design (including plans for instrumentation, data collection, and data analysis) will be reviewed by the LEA evaluation team and the ACE Project Director for feasibility and for ensuring that the total evaluation design will result in the kinds of evaluation data needed by the LEA and by USOE. At this time, any necessary modification in the design will be made and a data reporting plan (i.e., a plan for clearly reporting results of the evaluation) will be prepared.

Implement Data Collection Plan (Step 11)

After the total evaluation design has been reviewed and any necessary modifications made, the data collection plan discussed in Step 9 will be implemented. If possible, the training of the data collection personnel will be given before the academic year begins so that pre-test and pre-observation/interview data can be collected before any treatment begins. Regular reports to be submitted by teachers and others will be monitored continuously.

Analyze Data (Step 12)

The processing needed to prepare data for statistical analysis (coding, key-punching, etc.) will be implemented as soon as possible after the first batch of data has been collected. As data are collected and analyzed, any necessary modifications (resulting from sampling deviations, incomplete data, etc.) in the data analysis plan previously discussed will be made in consultation with the statistical consultant.

Report Findings (Step 13)

The report of findings will describe the setting demographically, the changes that occurred in the target populations, and the treatments that produced these changes. It will also contain conclusions and recommendations resulting from the evaluation findings.

The findings will be included in the final report of the project to USOE and will be submitted to the ERIC Clearinghouse for Career Education at Northern Illinois University. An offer will be made to present an interim report of project activities at the National Convention of the American Vocational Association in December, 1975, and to present a final report at the convention in 1976.

During the course of the project, news items will be submitted to education publications such as Career Education News, Education U.S.A., and Report on Education Research.

Exemplary Nature of ACE CE Project

The following special features of the ACE model demonstrates its exemplary nature:

1. It provides clearly defined steps that LEA's can use to develop an open communication system which involves the general public, parents, business-industry-labor community, and all components of the LEA.
2. It is an operational model which can be utilized by any LEA to meet local objectives because LEA's use the model to clarify and achieve locally defined objectives.
3. It provides a programmatic system for planning the total CE program.
4. It provides a list of steps that can be followed by any LEA to develop CE simulation units which enhance and demonstrate the relevancy of academic subjects.
5. It provides clearly defined procedures for cooperative planning by the LEA and local university staff in developing and implementing a comprehensive CE program.
6. It provides a 13-step prototype for gathering hard evaluation data on the effectiveness of the local CE program.

APPENDIX A

PERSONNEL DATA AND LEA INFORMATION

PERSONNEL DATA SHEETS

Information About Dr. Harry Huffman
Professor of Business and Office Education
Colorado State University

1. Obtained A.B. degree from Western Michigan University, Kalamazoo, Michigan, with a major in mathematics.

2. Obtained M.A. degree from the University of Michigan and Ed.D degree from Teachers College, Columbia University, with majors in business education.

3. Also studied three summers at Harvard University.

4. Has been a high school teacher in Michigan and New York City for a total of ten years.

5. Had two years of experience as cost accountant for Robert Gair Corporation, Haverhill, Massachusetts.

6. Held Department Headships at Georgia Southern College, University of Oklahoma, and Virginia Polytechnic Institute. Also was on the Staff of Ohio State University as a Professor of Education.

7. Is author of a number of textbooks in the field of recordkeeping, business arithmetic, office management, business mathematics, and business English.

8. Has been officer of a number of professional associations:
    - President, National Association for Business Teacher Education
    - President, Southern Business Education Association
    - President, Roanoke Chapter of the Administrative Management Society (Formerly NOMA)
    - Editor, 1969 NBEA Yearbook
    - President, National Business Education Association

9. Is a member of many other professional education associations and has contributed over 100 articles to the professional literature and chapters for yearbooks.

10. Was associated for one year with the Center for Programmed Instruction, New York City, (partially supported by the Carnegie Foundation and the Fund for Advancement of Education); during this time he was affiliated also with The Center on a research project for developing an elaborate program for teaching business mathematics in post high schools. The experimentation involved extensive individual testing and group testing in numerous post-high schools including junior colleges, community colleges, and private technical schools.

11. Has conducted workshops on programmed instruction at Wayne State University, University of Tennessee, George Peabody College for Teachers, and Virginia Polytechnic Institute.

12. Has been featured speaker on programmed instruction at Madison College (Virginia), Temple University in Philadelphia, New York University, University of Wisconsin, University of Michigan and others.

13. Completed a programming project in collaboration with an authority in linguistics involving English grammar, word usage, and spelling for prospective secretaries, correspondents, administrative assistants, administrative managers, and other high-level office employees.

14. Was the principal investigator on a research project concerned with business education programs for disadvantaged students in urban areas. The project was carried on in cooperation with Hunter College of the City of New York with Dr. Estelle Popham as Associate Investigator.

15. Was seminar coordinator for the National Seminar on Cooperative Education held in August 1966.

16. Is currently a Professor of Business and Office Education, Department of Vocational Education, Colorado State University, where he teaches graduate students and advises doctoral students.

(Proposed Curriculum Coordinator)

RESUME OF MYRA ALTFEST

PERSONAL INFORMATION

Home Address:
1900 Meadowaire
Fort Collins, Colorado
80521

Telephone:
(303)491-5884

Personal Data:
Height: 5'5"
Weight: 113
Age: 28.

EDUCATION

Hunter College of New York	M.S. in Education	June 1970
City College of New York	B.S. in Education	January 1968

EMPLOYMENT

EDITOR AND MATERIALS COORDINATOR-- Project Tomorrow, Colorado State University, Department of Vocational Education, Fort Collins, Colorado. Director: Dr. Harry Huffman. Dates: October, 1974 to present.
DUTIES: I developed two handbooks, one for vocational administrators and one for teachers. These handbooks detailed the conclusions of the project for developing career programs for disadvantaged and handicapped students. I assisted in planning, coordinating and conducting workshops throughout Colorado. I presented material at each workshop summarizing the programs described in the handbooks.

TEACHER, CURRICULUM ADVISOR-- New York City Board of Education, Public School 64, 605 East 9th Street, New York, New York. Principal: Mr. Stanley Stern. Dates: 1968-1974.
DUTIES: I taught an ethnically diverse inner city school population and fused career awareness material into academic subject areas. Concurrently, I was a curriculum advisor in this area. As elected teacher representative, I acted as a liason in maintaining communications between parents and community, and the school. I was co-leader of a group of emotionally disturbed girls, and worked in conjunction with Bellevue Hospital.

SUPERVISOR-- Neighborhood Youth Corps, Puerto Rican Family Institute, New York City, New York. Director:Mr. Augustin Gonzalez. Dates: February, 1968- September, 1968.
DUTIES: I supervised twenty teenagers in a work experience project. I developed programs for them to provide orientation and to teach English to newly arrived Puerto Rican families.

PUBLICATIONS

Vocational Education for Students With Special Needs-- An Administrator's Handbook January, 1975.

Vocational Education for Students With Special Needs-- A Teacher's Handbook to be published June, 1975.

RESUME- Continued

LICENSES AND CERTIFICATES

Type B- Professional Teacher
State of Colorado 1974

Teacher of Common Branches
New York City and State 1968

PROFESSIONAL ORGANIZATIONS

National Education Association; American Federation of Teachers

REFERENCES

Dr. Harry Huffman
Professor
Department of Vocational Education
Colorado State University
Fort Collins, Colorado
80523

Ms. Patricia Rocco
Teacher Educator
Dept. of Voc. Ed.
Colorado State University
Fort Collins, Colorado
80523

Ms. R. McGrath
249 E. 14 Street
New York, New York
10009

CAPABILITIES FOR CO-ORDINATING SATELLITE CENTER ACTIVITIES

1. Name Dr. Chris T. Chialtas
2. Title Coordinator, Career Education
3. Institution San Diego Unified School District
4. Address 4100 Normal District
San Diego, CA 92103

5. Educational Background (College and University)

College/University	Degree
UCLA	EDD
Cal State U, Northridge	M.S.
" " " "	B.S.

Courses, workshops, and other studies related to career education:
Various @ district level + for all "groups"
Credentialing Instructor, Adult Ed.
Consultant in Vocational Masters degree Program.

Will mail a complete data sheet which speaks to these issues.
Will send on 4/8/75

6. Experience in

Industry:
personnel representative
[illegible] [illegible], restaurant

Education:

Career Education:
Research specialist
consultant
Regional occ'l coordinator (> 50 programs)
career ed coordinator

Curriculum Development:
Dev of content + objectives of 'Kingdom of Could Be You' f[illegible]
Career Units in ESEA-III elementary career Ed project
writing committee memberships, various

Special Projects:
- Coordinate number of special funded projects including all of elementary program, Public Service Cluster, and others.

7. In what prior CE activities have you been involved in the LEA with which you will be working?

See Above (Elementary prog, etc.)

+ Inservice of district staff + community indivs + groups

+ coord. of 2 cluster progs -- Public Service + Science/Engineering

8. What qualifications and experiences especially qualify you for the position of satellite center coordinator?

Broad Background in several competencies, inclu evaluation (design + conduct), curric dev, systems analyses, multi-media, inservice, + more. Indepth in each component.

Background: vocational ed experience w/ perspective of previously "academic" background (Both specialist and generalist approach.

See whole resume which I'll send for more thought-out picture

CAPABILITIES FOR CO-ORDINATING SATELLITE CENTER ACTIVITIES

1. Name RODNEY FLEEMAN
2. Title DIRECTOR OF CAREER EDUCATION
3. Institution SIDNEY PUBLIC SCHOOLS
4. Address 1122 19TH ST.

   SIDNEY, NEBR. 69162

5. Educational Background (College and University)

College/University	Degree
COLORADO STATE UNIVERSITY	MEd
COLORADO STATE UNIVERSITY	BEd.

Courses, workshops, and other studies related to career education:

NATIONAL SYMPOSIUM BUSINESS & OFFICE CAREER EDUC.

COLLEGE COURSE IN CAREER EDUC.

MANY 2 & 3 DAY WORKSHOPS IN C.E.

6. Experience in

Industry: ELECTRONIC TECHNICIAN 5 YRS.

Education: INSTRUCTOR - MATHEMATICS & ELECTRONICS 5 YRS.

Career Education: RESEARCH ASSOCIATE - BOCEC PROJECT 1½ YRS

DIRECTOR - PROJECT HELP 1 YR.

Curriculum Development:

BOCEC PROJECT

Special Projects:

7. In what prior CE activities have you been involved in the LEA with which you will be working?

DIRECTOR OF COMPREHENSIVE K-12 C.E. PROGRAM.

PLAN & IMPLEMENT INSERVICE PROGRAMS

8. What qualifications and experiences especially qualify you for the position of satellite center coordinator?

CAPABILITIES FOR CO-ORDINATING SATELLITE CENTER ACTIVITIES

1. Name William E. Hoth
2. Title Professor of Educational Leadership
3. Institution College of Education Wayne State Univ.
4. Address Detroit, Mi 48202

5. Educational Background (College and University)

College/University	Degree
Teachers College Columbia	ED.D. + M. Ed.
UNIV. of Wisconsin	B.S. (ED.)

Courses, workshops, and other studies related to career education:

Conducted courses: graduate seminars

Advised research

Consulted on Curriculum for metropolitan Detroit schools

6. Experience in Industry:

Education: Chief consultant: Teacher Improvement Project, Santiago, Chile (Ford Foundation, 1966-67)

Career Education:

Curriculum Development: Consultant 1960-1975 on curriculum development and leadership, metropolitan Detroit

Special Projects:

College committee on career education

Developing research design for dissertation investigation

7. In what prior CE activities have you been involved in the LEA with which you will be working?

Seminar leader with curriculum directors in Detroit schools and suburbs

8. What qualifications and experiences especially qualify you for the position of satellite center coordinator?

chairperson, doctoral program in Leadership in Curriculum. Extensive experience in local planning workshops, specialist in planning and conducting workshops and training sessions for government (HUD GAO state audit officers in New York, Colorado, and Wisconsin)

CAPABILITIES FOR CO-ORDINATING SATELLITE CENTER ACTIVITIES

1. Name James B. Mayo
2. Title Director - Career Education
3. Institution Fremont Unified School Dist
4. Address 40775 Fremont Blvd.
Fremont, CA 94538

5. Educational Background (College and University)

College/University	Degree
Humboldt State Univ	A.B
" " "	M.A. (Sec Educ)
Univ. of Santa Clara	M.B.A. (Bus Mgmt)

Courses, workshops, and other studies related to career education:

Vocational Guidance - 2 units

Work Experience - 6 units

Chief State School Officers CE wkshp

Numerous Local & State workshops

6. Experience in

Industry:

Real Property Appraiser - State Division of Hwys.
Public Relations - Weibel, Inc
Bookkeeping Firm - Self-owned

Education:

Teacher / Dept Head Business Education - Secondary - 9 years
Work Experience Coordinator - Secondary - 4 years
Teacher Accounting - Community College - 2 years

Career Education:

Pilot testing district for Public Services Career Materials
" " " " Communications Media Cluster
" " " " Appalachia Educational Laboratory

Curriculum Development:

Established goals & objectives for State Work Experience Educ
Developed programs for Fremont-Newark R.O.P.

Special Projects:

Consultant - Business Educ Consultant Services (State Voc Dept)
Consultant - Public Services Workshops
Consultant - Business Education Management Conferences (State Dept)

7. In what prior CE activities have you been involved in the LEA with which you will be working?

H. S. Career-Decision Making system.
All Occupational Preparation programs
Jr Hi DO-CEC
Jr Hi Construction, Office, Communications clusters
Elem Awareness programs
H. S. & Adult Career Guidance Centers
Jr Hi Career Guidance Centers

8. What qualifications and experiences especially qualify you for the position of satellite center coordinator?

Visited, reviewed and analyzed 5 USOE funded Career Educ sites.
Visited, reviewed and analyzed 7 State funded Career Education sites.
Director & developed programs in #7 above
Have consulted for USOE/State in-service CE training programs.
Developed and published current District Plan for Career Education.

CAPABILITIES FOR CO-ORDINATING SATELLITE CENTER ACTIVITIES

1. Name Celestine Mongo
2. Title Chairperson, Business Education Dept.
3. Institution Northern High School
4. Address 9026 Woodward Avenue
   Detroit, Michigan 48202

5. Educational Background (College and University)

College/University	Degree
University of California	B.S., Business Adm.
Wayne State University, Detroit	M. Ed., Business Ed.

Courses, workshops, and other studies related to career education:
Seminar in Curriculum Development, Wayne State
Workshops, Curriculum Materials Development, Wayne State and Detroit Public Schools

6. Experience in

Industry:
5yrs., secretary, bookkeeper, office administration
financial investigator
5yrs., (part-time) secretary, typist, bookkeeper

Education:
16½ yrs., teacher of business education subjects, Detroit Public Schools.

Career Education:
1 yr., Materials Development, Colorado State University.

Curriculum Development:
1½ yrs., fulltime and 7 yrs. parttime, Detroit Public Schools

Special Projects:
Business & Office Career Ed. Curriculum Project, Colorado State University
Northern High-Michigan Bell Telephone Co. Experimental School Project, Detroit Board of Ed., and Michigan Bell Telephone Company.
Project "29" (Curriculum Materials Development), Hunter College, New York City, N.Y.

7. In what prior CE activities have you been involved in the LEA with which you will be working?

Materials Development and Program Implementation, Northern High School Detroit, and Detroit Public Schools.

8. What qualifications and experiences especially qualify you for the position of satellite center coordinator?

See No. 6.

CAPABILITIES FOR CO-ORDINATING SATELLITE CENTER ACTIVITIES

1. Name Annell Lacy Simcoe
2. Title Assoc. Prof., Voc.-Ed
3. Institution Rutgers University
4. Address Graduate School of Ed.
   10 Seminary Place
   New Brunswick, NJ 08903
5. Educational Background (College and University)

College/University	Degree
Texas Woman's Univ	B.S. MA
The Ohio State Univ	Ph.D.

Courses, workshops, and other studies related to career education:
288:502 Career Education; graduate course taught at Rutgers
Co-director, National Workshop on Career Education, Su '73

6. Experience in

Industry:
Secretarial, 1960-64

Education:
High School Teacher, Bus Ed 1 year

Career Education:
It's full time around Rutgers!

Curriculum Development:
Developed Teacher Ed Cert program, supervisor certification program, and masters degree program in bus. ed at Rutgers

Special Projects:
see vitae

7. In what prior CE activities have you been involved in the LEA with which you will be working?

8. What qualifications and experiences especially qualify you for the position of satellite center coordinator?

CAPABILITIES FOR CO-ORDINATING SATELLITE CENTER ACTIVITIES

1. Name Clyde W. Welter
2. Title
3. Institution Georgia State University
4. Address 33 Gilmer Street
Atlanta, Ga 30303

5. Educational Background (College and University)

College/University	Degree
Ohio State University	PhD
Indiana University	MS
Indiana University	BS

Courses, workshops, and other studies related to career education:
Curriculum Specialist -- National Business and Office Career Ed. Project
Faculty member in the Dept. of Vocational and
Career Development, Georgia State University

6. Experience in

Industry:
Personnel manager
Accountant
Travel Consultant and General Office Manager

Education:
Junior High School Teaching (1961-2)
High School Teaching (1962-6)
University Teaching (1970 - present)

Career Education:
Conducted career ed workshops (Atlanta)
Curriculum Director for HEW-funded CE project

Curriculum Development:
Published author of career simulation material
Co-authored CE curriculum guides for BO-CE Project

Special Projects:

In addition to above, worked on 3 national projects at the Center for Vocational Education, The Ohio State University

7. In what prior CE activities have you been involved in the LEA with which you will be working?

Bo-CEC project, in which LEA was one of 11 national test sites.

8. What qualifications and experiences especially qualify you for the position of satellite center coordinator?

Broad background in (1) career education; in (2) both vocational education and academic education; (3) in writing for commercial publishers, and (3) in research.

Co-author of this proposal.

DESCRIPTION OF LOCAL EFFORTS

DESCRIPTION OF CURRENT LOCAL EFFORT

(Possibilities for Incremental Change)

1. Name and Title Dr. Chris T. Chialtas

University or School Affiliation San Diego Unified School District

Location 4100 Normal Street, San Diego CA 92103

2. In the space below, briefly describe the demographics of the district with which you will be working (rural/urban setting, economic base, student population, student-teacher ratio, number of teachers, etc.)

Urban-to-Suburban; full range of socio-economic levels and racial mixes.; 125,000-plus students, K-12; Approximately 5500 Teachers in district. Needs and resources of large, Urban District are quantitatively and qualitatively unique. Large population of "disadvantaged" and high unemployment (youth) rates.

3. List schools in your district that are and have been involved in career education projects and activities. (If additional space is needed, use the back of this sheet.)

mples
ly:

School	Grade Level	Funded Project Title or Other Activity
Lindbergh Elementary	K-12	Project CHOICE (Children Have Options in Career Education)
Crawford High School	10-12	Exemplary Project in Marketable Skills Acquisition
Wright Bro's Career H.S.	10-12	Cluster-Structured Career/Vocational H.S.

+ Many others.

4. How do you anticipate building the programs in the above schools? Specifically, how do you plan to:

a. Expand CE into new classes, programs, and schools;

Inservice regarding Master Plan for implementing; plus promotion of the fusion and infusion processes.

b. Introduce new aspects into already existing programs;

Appropriate new exploratory courses for select clusters are in order, career and self-awareness counseling program needs development)

c. Involve the community leaders in planning and implementing the CE program;

Utilization of project (and already existing) advisory groups as well as survey feedback from community.

d. Involve various elements of the instructional and non-instructional staff in planning and implementing CE;

Draw upon existing curriculum specialists, consultants, and resource persons to promote delivery of career ed. Identify a cadre of "regular" Teachers/counselors to dev. on-going delivery post funding + completion of project

e. Involve parents and students;

Advisory groups -

f. Involve employers and industrial leaders.

Surveys, advisory groups

5. What specific new approaches do you plan to use in CE next year? Do you plan to:

a. Introduce fusion in all courses in the curriculum, in core courses only, in pre-vocational and vocational courses only, etc.

Battery of all of the above -- no single approach will suffice in large, Urban District.

b. Establish a CE resource center.

Have [illegible] career centers - Jr + Sr Highs + developing media centers w/career resources as component

c. Involve teachers in writing CE curriculum materials.

Absolutely -- best way to go for expertise that matters & to assure use of material.

d. Use other new approaches? (Please list.)

Use of same teachers as in "c" above to inservice other teachers -- peer relationships & "realistic" perspectives re problems and useful, workable solutions -

DESCRIPTION OF CURRENT LOCAL EFFORT

(Possibilities for Incremental Change)

1. Name and Title RODNEY FLEEMAN, DIRECTOR OF CAREER EDU

University or School Affiliation SIDNEY PUBLIC SCHOOLS

Location SIDNEY, NEBRASKA

2. In the space below, briefly describe the demographics of the district with which you will be working (rural/urban setting, economic base, student population, student-teacher ratio, number of teachers, etc.)

1. PERCENTAGE OF STUDENTS (TARGET GROUP):
RURAL (FEWER THAN 2,500 INHABITANTS) 10%
URBAN (MORE THAN 2,500 INHABITANTS) 90%

2. CURRENT LEA EXPENDITURE #946.02

3. TOTAL NO. OF STUDENTS 197

4. TOTAL NO. OF TEACHERS 19.6

3. List schools in your district that are and have been involved in career education projects and activities. (If additional space is needed, use the back of this sheet.)

School	Grade Level	Funded Project Title or Other Activity
SIDNEY HIGH SCHOOL	10-12	PROJECT HELP
SIDNEY JUNIOR HIGH	7-9	" "
ST. PATRICKS HIGH (PAROCHIAL SCHOOL)	7-12	" "

(OVER)

4. How do you anticipate building the programs in the above schools? Specifically, how do you plan to:

a. Expand CE into new classes, programs, and schools;

K-6

b. Introduce new aspects into already existing programs;

UTILIZE TEACHERS IN WRITING CURRICULUM

c. Involve the community leaders in planning and implementing the CE program;

UTILIZE COMMUNITY ADVISORY COMMITTEE

d. Involve various elements of the instructional and non-instructional staff in planning and implementing CE;

e. Involve parents and students;

f. Involve employers and industrial leaders.

5. What specific new approaches do you plan to use in CE next year? Do you plan to:

a. Introduce fusion in all courses in the curriculum, in core courses only, in prevocational and vocational courses only, etc.

IN ALL K-6 CLASSROOMS

b. Establish a CE resource center.

EXPAND EXISTING C.E. RESOURCE CENTER

c. Involve teachers in writing CE curriculum materials.

YES.

d. Use other new approaches? (Please list.)

3 CONTINUED

NORTH ELEMENTARY	K-6	PROJECT HELP
CENTRAL ELEMENTARY	K-6	" "
SOUTH ELEMENTARY	K-6	" "

DESCRIPTION OF CURRENT LOCAL EFFORT

(Possibilities for Incremental Change)

1. Name and Title William E. Hoth

University or School Affiliation College of Education

Location Wayne State Univ., Detroit, Mi 48202

2. In the space below, briefly describe the demographics of the ~~district~~ univ. with which you will be working (rural/urban setting, economic base, student population, student-teacher ratio, number of teachers, etc.)

urban, 6th largest city, inner city center, 6,000 full-time equivalent student body, 20% black tudent enrollment. Ratio in College of Education minimum class (1 to 15)

3. List schools in your district that are and have been involved in career education projects and activities. (If additional space is needed, use the back of this sheet.)

School	Grade Level	Funded Project Title or Other Activity
College of Educ.	15 +	State project for counselors
"	15 + and graduated.	Masters program with "core" in Career educ.

4. How do you anticipate building the programs in the above schools? Specifically, how do you plan to:

a. Expand CE into new classes, programs, and schools;

Build in "look" at leisure.

✓ b. Introduce new aspects into already existing programs;

Emphasis on comprehensive planning with curriculum director

c. Involve the community leaders in planning and implementing the CE program;

✓ d. Involve various elements of the instructional and non-instructional staff in planning and implementing CE;

Develop research proposals

e. Involve parents and students;

✓ f. Involve employers and industrial leaders.

Convocations etc.

5. What specific new approaches do you plan to use in CE next year? Do you plan to:

   a. Introduce fusion in all courses in the curriculum, in core courses only, in prevocational and vocational courses only, etc.

   b. Establish a CE resource center.

   c. Involve teachers in writing CE curriculum materials.

   d. Use other new approaches? (Please list.)

DESCRIPTION OF CURRENT LOCAL EFFORT

(Possibilities for Incremental Change)

1. Name and Title Celestine Mongo Chairperson, Business Education Northern High School, Detroit

   University or School Affiliation Wayne State University and Detroit Public Schools

   Location Detroit, MI 48202

2. In the space below, briefly describe the demographics of the district with which you will be working (rural/urban setting, economic base, student population, student-teacher ratio, number of teachers, etc.)

   Urban setting; economic base, low- to upper middle-income families; 233 elementary, 49 junior and middle schools, and 22 senior high schools; 10,486 teachers; student population, 257,396; student-teacher ratio, approximately 30-1.

3. List schools in your district that are and have been involved in career education projects and activities. (If additional space is needed, use the back of this sheet.)

School	Grade Level	Funded Project Title or Other Activity
Northern High	9	BO-CEC and Business Ed. Exemplary Program.

   Region I, in Detroit, is planning for the implementation of a CE program in all of its schools, beginning with the 1975-76 school year.

4. How do you anticipate building the programs in the above schools? Specifically, how do you plan to:

   a. Expand CE into new classes, programs, and schools;

   All core classes will be involved in CE activities during the next school year.

   b. Introduce new aspects into already existing programs;

   Other classes will be involved in CE activities as of 2-76.

   c. Involve the community leaders in planning and implementing the CE program;

   Via workshops and conferences

   d. Involve various elements of the instructional and non-instructional staff in planning and implementing CE;

   Special planning meetings

   e. Involve parents and students;

   Via workshops

   f. Involve employers and industrial leaders.

   Establishing advisory councils

5. What specific new approaches do you plan to use in CE next year? Do you plan to:

   ✓ a. Introduce fusion in all courses in the curriculum, in core courses only, in pre-vocational and vocational courses only, etc.

   We will begin with core subjects, then expend to total school program.

   b. Establish a CE resource center.

   This will be school- or university-based.

   ✓ c. Involve teachers in writing CE curriculum materials.

   This will be done in school-based or university-based workshops

   d. Use other new approaches? (Please list.)

DESCRIPTION OF CURRENT LOCAL EFFORT

(Possibilities for Incremental Change)

1. Name and Title James B. Mayo - Director CE

University or School Affiliation Fremont U.S.D.

Location Fremont, CA

2. In the space below, briefly describe the demographics of the district with which you will be working (rural/urban setting, economic base, student population, student-teacher ratio, number of teachers, etc.)

K-12 A.D.A. of 32,600 students — 1100 Teachers (30-1 ratio avg.)
Suburban city of 118,000 people, Average family income $13,000,
19.2% ethnic minority (increasing) due to industrial expansion.
9-12 enrollment is 47% Vocational & 57% Homemaking

3. List schools in your district that are and have been involved in career education projects and activities. (If additional space is needed, use the back of this sheet.)

School	Grade Level	Funded Project Title or Other Activity
Irvington H.S.	9-12	Career Decision Making (SEARCH)
Thornton Jr. Hi	7-8	BO-CEC, World of Const, Communicati
Green-Reynolds (OVER)	K-6	Community Career Educ. Exploration

4. How do you anticipate building the programs in the above schools? Specifically, how do you plan to:

a. Expand CE into new classes, programs, and schools;

In-service of staffs in methodology & curriculum revision,

b. Introduce new aspects into already existing programs;

Plan & sequence CE activities

c. Involve the community leaders in planning and implementing the CE program;

Done

d. Involve various elements of the instructional and non-instructional staff in planning and implementing CE;

add representatives from all schools participating

e. Involve parents and students;

already on Advisory Committee, adult education for parents established

f. Involve employers and industrial leaders.

400 citizens currently sponsoring work experience,

5. What specific new approaches do you plan to use in CE next year? Do you plan to:

   a. Introduce fusion in all courses in the curriculum, in core courses only, in prevocational and vocational courses only, etc.

   Core courses and Industrial Arts classes

   b. Establish a CE resource center.

   Done

   c. Involve teachers in writing CE curriculum materials.

   Release 30 teachers for 10 days each

   d. Use other new approaches? (Please list.)

   Release 10 teachers for feeder & high schools for 10 days each to articulate

#3	Robertson Jr Hi	7-8	Construction Cluster
	Hopkins Jr Hi	7-8	Office Occupations
	All High Schools (7)	9-12	Career Guidance Centers
	" Jr Hi's (7)	7-8	" " "

LETTERS SUPPORTING PROPOSAL

Sidney Public Schools

RUSSELL J. PEDERSEN
Superintendent

Sidney, Nebraska
69162
(308) 254-5853

OARD OF EDUCATION
BOB COOK
PRESIDENT
RS. DAVID W. YOUNG
VICE PRESIDENT
C. NEIL ALLISON
. CORNELIUS, Jr., M.D.
JACK KNICELY
HN W. PLATZ, D.D.S.

ONARD WINTERMOTE
USINESS MANAGER
SECY. BD. OF ED.

GEORGE HINN
ASST. SUPT. &
H. S. PRINCIPAL

RALPH SPENCER
DIRECTOR OF
UIDANCE SERVICES

M. FANKHAUSER
. H. S. PRINCIPAL
LDRED TILLOTSON
EM. COORDINATOR &
IN. CENTRAL ELEM.

ILLIAM ROGERS
RIN. NORTH ELEM.
FRANK FINNEY
RIN. SOUTH ELEM.

April 10, 1975

Dr. Harry Huffman
Department of Vocational Education
Colorado State University
Fort Collins, Colorado 80521

Dear Dr. Huffman:

This letter is to confirm our willingness to participate in the ACE Career Education Program.

This program would provide the Sidney Public Schools with the opportunity to make needed incremental changes within our existing K-12 career education program. The ACE program would facilitate the efforts of Sidney Public Schools in developing a comprehensive program which would demonstrate the career education philosophy, methods, and program activities to students, teachers, and the community.

Through hard evaluative data the program would also provide Sidney Public Schools with the information on which to base rational curriculum decisions concerning career education.

A program of this nature would enhance our school district's career education efforts and would also provide a mode for demonstrating career education throughout the United States.

We would appreciate the opportunity to participate in this exemplary program.

Sincerely,

Rodney Fleeman

Rodney Fleeman
Director of Career Education

RF:lr

FREMONT-NEWARK REGIONAL OCCUPATIONAL PROGRAM
40775 FREMONT BLVD. • FREMONT, CALIFORNIA • 94538 • (415) 657-1865

April 10, 1975

Dr. Harry Huffman
Department of Vocational Education
Colorado State University
Fort Collins, Colorado 80523

Dear Dr. Huffman:

The Career Education, Vocational Education, and Instructional Division staffs have reviewed the A.C.E. Career Education Model proposal and find that this approach meets all of the criteria for career education that we have developed for our district philosophy.

We want to compliment you and your staff for utilizing an approach that is feasible for implementing career education, K-12, in a school district such as ours. This is the first program that we have been able to accept philosophically and fiscally.

We are very happy to have been identified as one of the proposed demonstration sites. We want to indicate to you our total support of your proposal.

Sincerely yours,

James B. Mayo

James B. Mayo, Director
Career Education

js

DR. WILLIAM J. BOLT
DISTRICT SUPERINTENDENT

FREMONT UNIFIED SCHOOL DISTRICT
40775 FREMONT BOULEVARD ■ FREMONT, CALIFORNIA ■ 94538
PHONE 657-2350 AREA CODE 415

April 10, 1975

Dr. Harry Huffman
Department of Vocational Education
Colorado State University
Fort Collins, Colorado 80523

Dear Dr. Huffman:

The Fremont Unified School District desires to be a part of the field testing and be identified as a demonstration site for the A.C.E. Career Education Model that is proposed by your organization.

We will cooperate in all aspects and be subject to evaluation based upon your evaluation instruments.

Sincerely yours,

William J. Bolt
Superintendent

js
cc: J. Mayo

APPENDIX B

FUNDED PROJECTS COMPLETED BY APPLICANT

APPENDIX B

FUNDED PROJECTS COMPLETED BY HARRY HUFFMAN WITH OTHERS

Funded Projects--Reports of

A Taxonomy of Office Activities for Business and Office Education. The Center for Vocational and Technical Education, Ohio State University, 1968. 163 pp. (With Mary Margaret Brady, Marla Peterson, and Annell Lacy.)

Business Office Occupations Student Training, Preliminary Report. The Center for Vocational and Technical Education, Ohio State University, 1967. 251 pp. (With Marla Peterson.)

Writing Performance Goals: Strategy and Prototypes. (A Manual for Vocational Education.) Gregg Division, McGraw-Hill Book Company and The Center for Vocational and Technical Education, 1971. 101 pp. (With Edward E. Byers.)

Business Education for the Emergent Office. The Center for Vocational and Technical Education, Ohio State University, 1970. 183 pp. (With Dale D. Gust.)

Modifying Disadvantaged Students' Perceptions of Office Work. The Center for Vocational and Technical Education, Ohio State University, 1971. 93 pp. (Superintendent of Documents, U.S. GPO, Stock Number 1780-0846.) (With Clyde W. Welter and Marla Peterson.)

Project Tomorrow. Department of Vocational Education at Colorado State University and The Colorado State Board for Community Colleges and Occupational Education, Phase I, 1971. 62 pp. Phase II, 1972. 83 pp. (With Frank A. Baugh.)

Cooperative Student Program for Distributive and Business Education. (A Manual for Employers of Cooperative Students.) Department of Vocational Education, Colorado State University and the Stat Board for Community Colleges and Occupational Education, 1972. 13 pp. (With Joseph C. Roberts.)

Designs for the Preparation of Vocational and Technical Teachers of Socioeconomically Disadvantaged Youth. The Center for Vocational and Technical Education, Ohio State University, June 1972. 159 pp. (Superintendent of Documents, U.S. GPO, Stock Number HE 5.2: D 63/6.) (With Clyde W. Welter.)

Business and Office Career Education Curriculum Project. U.S.O.E. Contract # OEC-0-73-5230. Colorado State University, Fort Collins, Colorado.

APPENDIX C

LEA CONTRIBUTIONS

LOCAL EDUCATION AGENCY CONTRIBUTION

Requested of the Local School District:

1. Name and title: James B. Mayo Director Career Educ
Homer Sweeney Coord of Guidance + Work Experience

2. Administrative time %: 10

3. Estimated teacher person-hours:

Example: teacher enrollments at own expense in project conducted training for university or district credit

25 persons X 36 hours each = 900 hours

4. District provision of released time, person-hours: 180
3 Jr Hi @ 10 persons each for 6 hours

5. District sponsored workshops, meetings, and conferences at district expense, person hours:

400 hours

6. New materials and publications:

all locally developed materials

7. Office space provided:

Complete office with equipment for 1/2 Time Coordinator

8. Access to library facilities containing CE materials:

District Instructional Materials Center has CE library available all day.

9. Availability of free consultants:

Director & Coordinator

10. Other:

LOCAL EDUCATION AGENCY CONTRIBUTION

See our proposed Budget [illegible]

Requested of the Local School District:

1. Name and title: Dr. Chris T. Charlton
Coordinator, Career Education
San Diego Unified School District
4100 Normal Street.
San Diego, CA 92103

2. Administrative time %: 50%

3. Estimated teacher person-hours:

Example: teacher enrollments at own expense in project conducted training for university or district credit

No limit, regular district procedures for grant, credit -- via ① district salary units ② adult Ed ③ state university + masters program partly taught by district personnel.

4. District provision of released time, person-hours: Provisions for use of regular teachers for such projects (with additional pay)

5. District sponsored workshops, meetings, and conferences at district expense, person hours:

Several on-going mechanisms can be used as clearinghouses for project activities (district-run classes, etc.

6. New materials and publications:

Much district developed and purchased material as the substances of workshops and inservice sessions.

7. Office space provided:
portion of Career Education Director, coordinator and support staff devoted to project. Space utilized at site levels where appropriate

8. Access to library facilities containing CE materials:
- County Department of Ed professional library
- District Professional Library
- Career Ed Unit library w/ recent acquisition
- Instructional media center (dissemination) facilities
- new materials Dev. + Dissem. system

9. Availability of free consultants:
- curriculum specialists, consultants, resource teachers.
- Cluster task forces.
- Advisory committees -- projects + occ'l courses.
- Community resources.

10. Other:

Career Ed Unit Staff.

LOCAL EDUCATION AGENCY CONTRIBUTION

Requested of the Local School District:

1. Name and title: RODNEY FLEEMAN
DIRECTOR OF CAREER EDUCATION
SIDNEY PUBLIC SCHOOLS
SIDNEY, NEBR. 69162

2. Administrative time %: 50%

3. Estimated teacher person-hours:

Example: teacher enrollments at own expense in project conducted training for university or district credit

POSSIBILITY

4. District provision of released time, person-hours: 100 PERSON-HOURS

5. District sponsored workshops, meetings, and conferences at district expense, person hours:

1 TEACHER INSERVICE DAY
1 C.E. CONFERENCE

6. New materials and publications:

7. Office space provided:

OFFICE SPACE
TELEPHONE
UTILITIES
POSTAGE

8. Access to library facilities containing CE materials:

COMPREHENSIVE C.E. RESOURCE LIBRARY

9. Availability of free consultants:

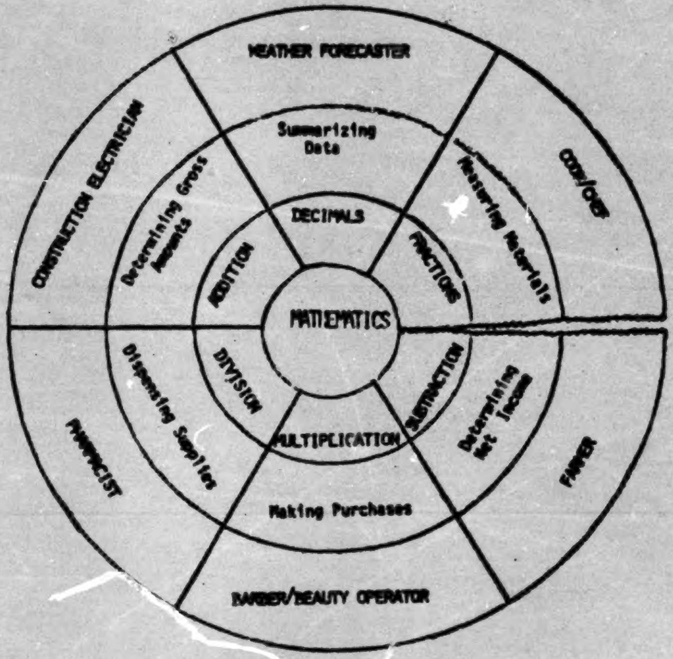
5 DAYS - FREE CONSULTANTS

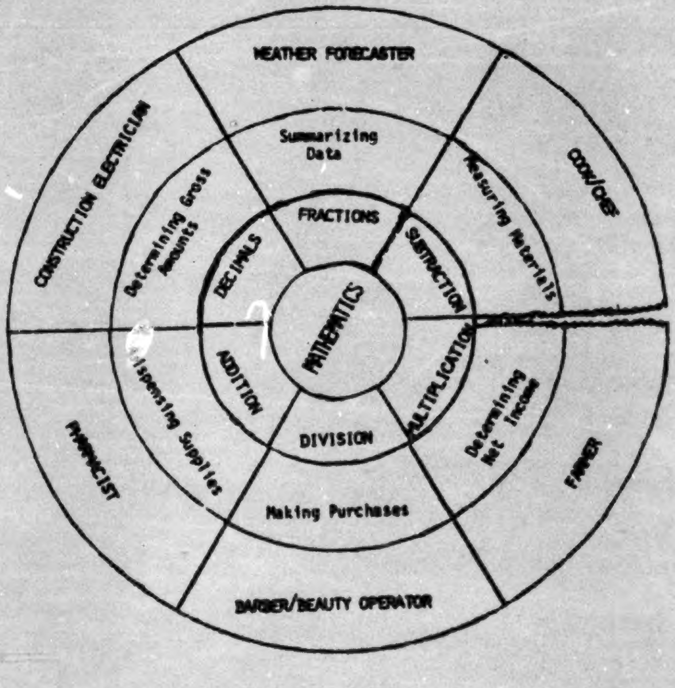
10. Other:

APPENDIX D

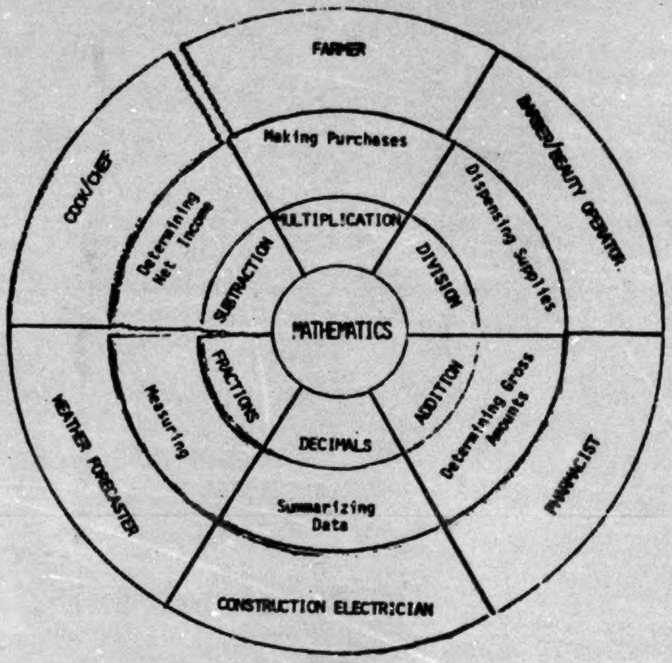
MODELS FOR INFUSING CAREER EDUCATION IN SOCIAL STUDIES AND IN MATHEMATICS

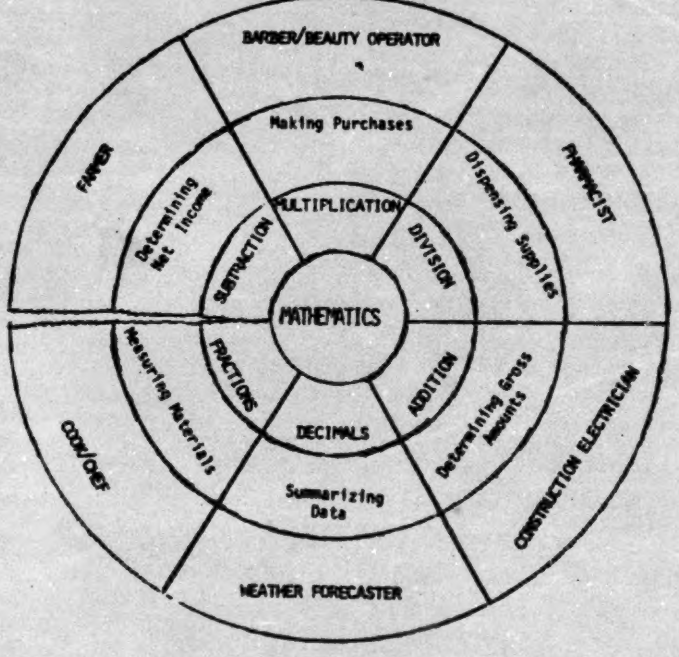
THE ACE MODEL FOR CAREER EDUCATION



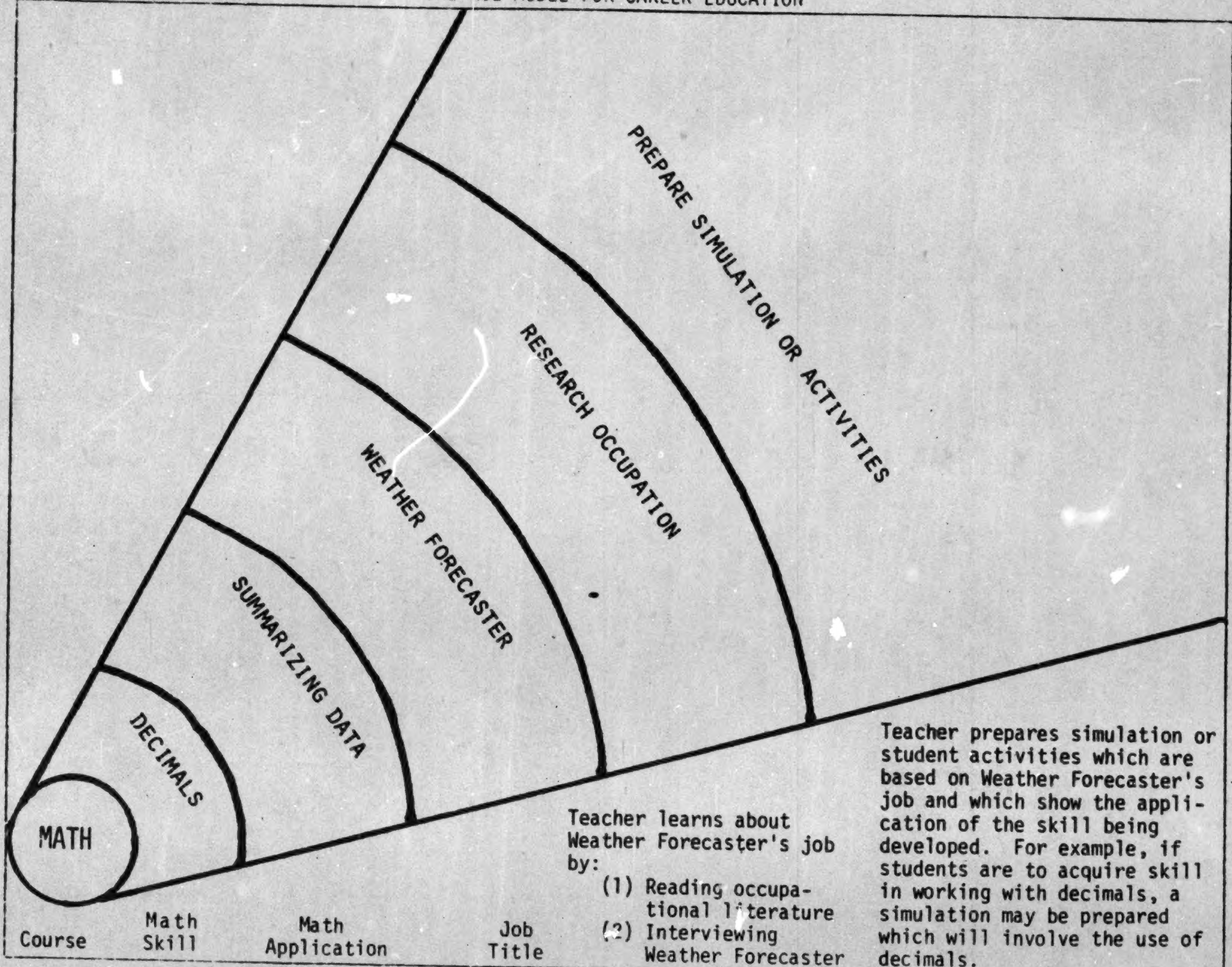


THE ACE MODEL FOR CAREER EDUCATION





THE ACE MODEL FOR CAREER EDUCATION

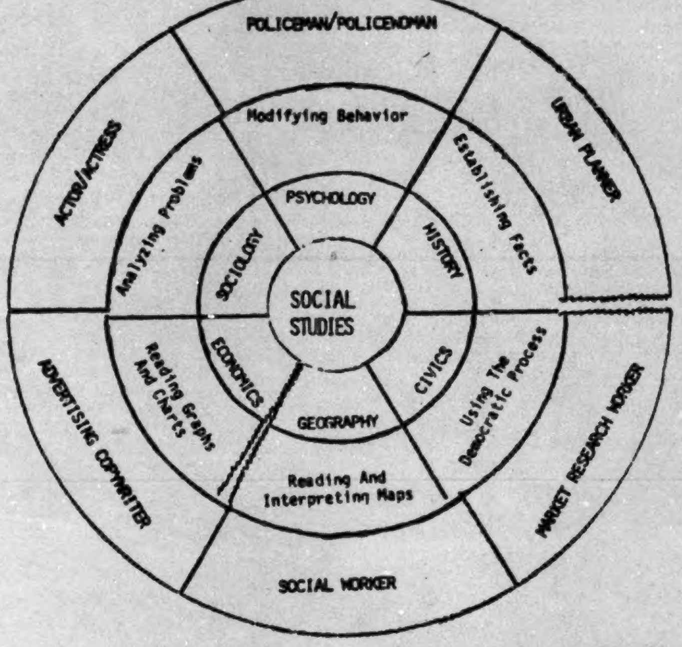


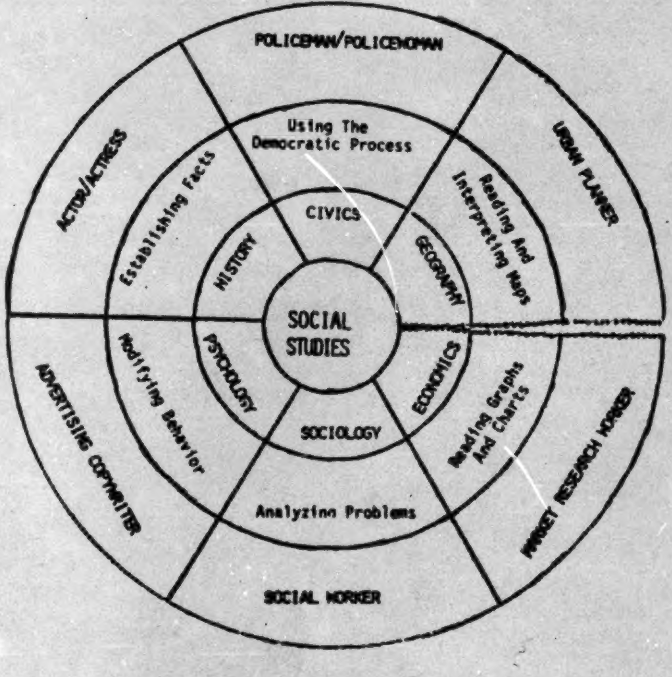
Teacher learns about Weather Forecaster's job by:

(1) Reading occupational literature
(2) Interviewing Weather Forecaster

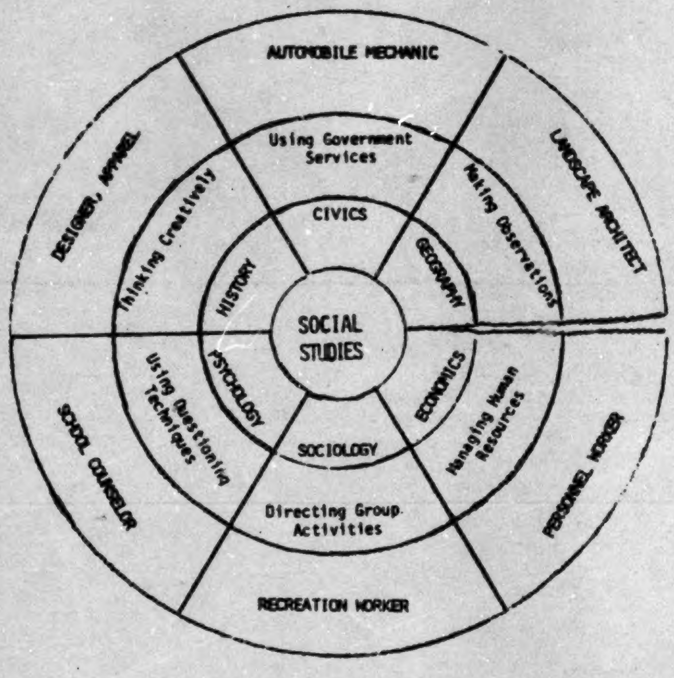
Teacher prepares simulation or student activities which are based on Weather Forecaster's job and which show the application of the skill being developed. For example, if students are to acquire skill in working with decimals, a simulation may be prepared which will involve the use of decimals.

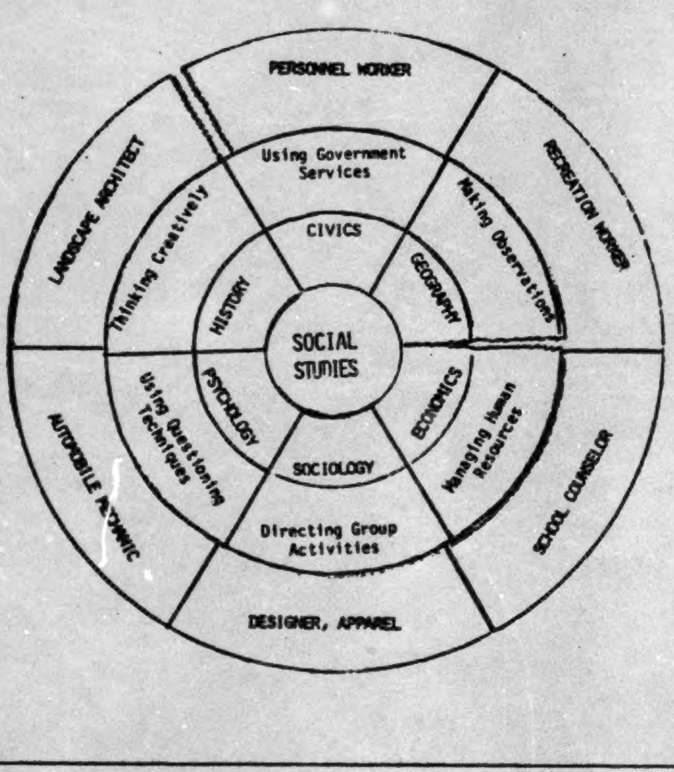
THE ACE MODEL FOR CAREER EDUCATION



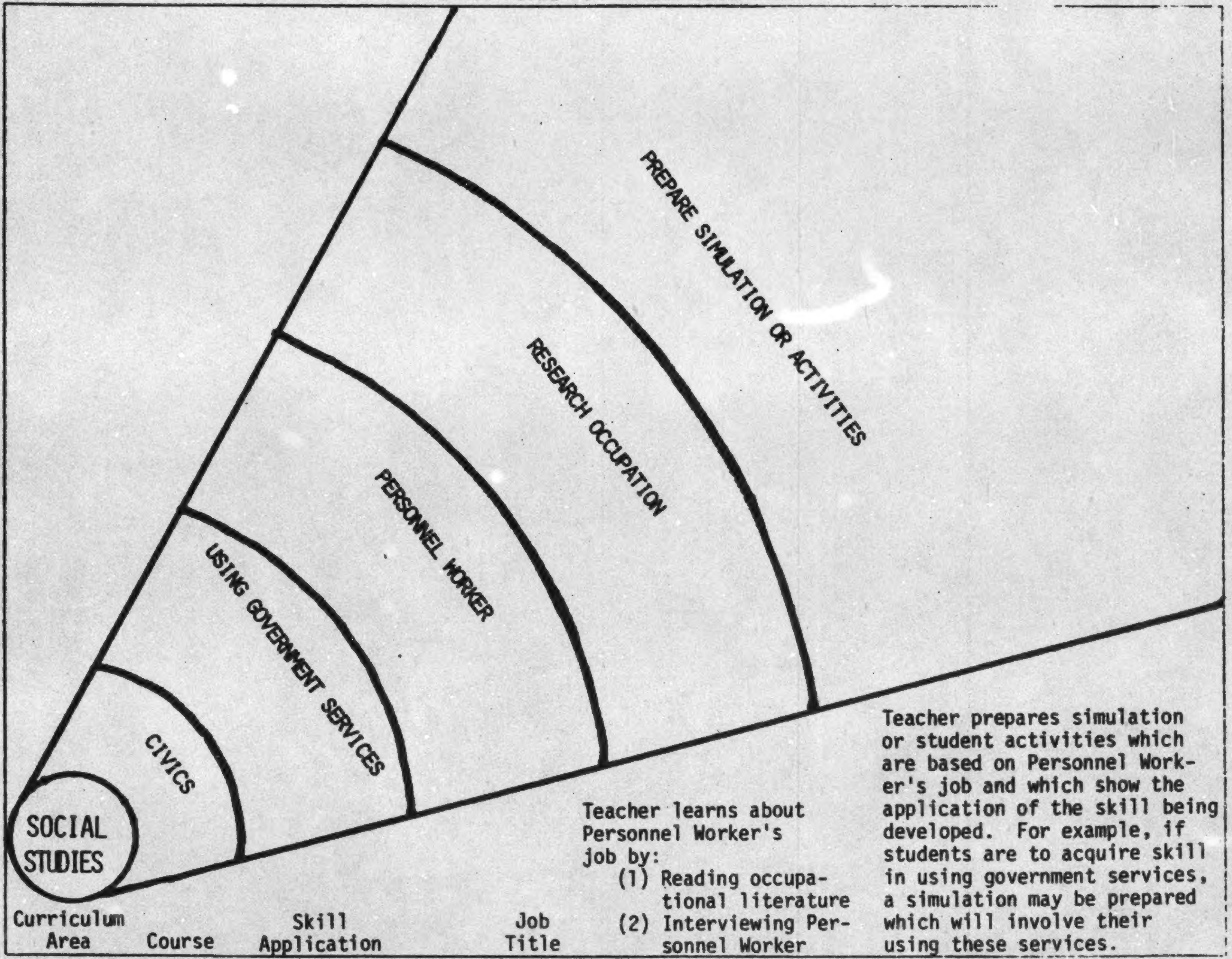


THE ACE MODEL FOR CAREER EDUCATION





THE ACE MODEL FOR CAREER EDUCATION



Teacher learns about Personnel Worker's job by:
(1) Reading occupational literature
(2) Interviewing Personnel Worker

Teacher prepares simulation or student activities which are based on Personnel Worker's job and which show the application of the skill being developed. For example, if students are to acquire skill in using government services, a simulation may be prepared which will involve their using these services.

APPENDIX E

SAMPLE ACE UNIT

UNIT 15

HOW A TRAVEL AGENT

USES THE SKILL OF

COMPREHENSION

PURPOSE

This unit deals with the career of travel agent. The unit is designed to give the students experience with the skill of comprehension while learning about the career of travel agent.

MAJOR ACTIVITY

The simulation activities included in this unit are activities travel agents encounter as a part of their jobs. The simulation activities in this unit revolve around a travel agent's ability to comprehend and take action accordingly.

Before Class Begins:

1. Duplicate enough copies of the simulation packet (white sheets at the end of this unit) to provide each student with a copy.
2. Read "Background Information on Travel Agents" on page 248.
3. Review the page entitled "Robin Wells' Dialogue," page 241, since you will role play Robin Wells by reading this dialogue to the students when the simulation begins.
4. You may want to write words with difficult spellings on the chalkboard before class begins so students can refer to correct spelling of such words as Puerto Rico, San Juan, etc.

During Class:

1. Distribute the simulation packets, reading and discussing the first page with students. Suggested discussion topics are given in the Teacher's Key which begins on page 242.
2. Ask students to turn to the second page of the simulation. Explain that they are to assume roles of travel agents while you assume the role of Robin Wells, a customer of the travel agency. Explain, also, that you will tell them about a trip you (as Robin Wells) want them to plan for you, and they are to make notes on the trip planning form so that they can make your travel arrangements. Tell students they will use these notes to complete the remaining travel forms.
3. Role play Robin Wells by reading aloud (in a conversational tone) "Robin Wells' Dialogue," page 241, while students take notes on the trip planning form.
4. When you have completed the dialogue, ask students to make Robin Wells' travel arrangements by completing the simulation packet. Explain how the 24-hour time used on the timetable is converted to standard time.
5. When most students have finished the simulation activities, check and discuss their work, using the teacher's key as a guide. If time permits, use one or more of the discussion topics or optional activities listed on the following page to conclude the unit.

OPTIONAL ACTIVITIES

1 "Pass the Word" -- This game provides students with an exercise in comprehending and repeating a message. Whisper a short story or phrase to a student at one end of the classroom. Tell the student to whisper the message to the next student, and so on, until all students in the class have heard the message and passed it on. When the message has reached the final student, ask him to repeat the message he heard to the entire class. Then read aloud to the class your original message and compare the two.

Ask students what differences there were in the content of the two messages, and what reasons they think contributed to the communications gap.

2 "What Makes a Good Listener?"-- Through a class discussion, decide on some standards for good listening. For example, good listeners keep their eyes on the speaker, don't fake attention, don't "tune out" difficult listening. Post these rules in front of the class so students can review their own listening habits.

3 "What Am I?" -- This exercise gives students an opportunity to form a mental picture of an object and name it based upon an oral description.

1. Have students number a page from 1 through 8.
2. Read each of the descriptions given below and have students guess and write down the name of whatever you are describing. (A variation might be for students to interrupt your reading whenever they think they know the name of the object.)
3. When you have read a description, ask different students to give their answers. Compare their answers to the ones shown below.
4. Point out that people form different mental pictures of an object after hearing the same description. The way people relate to what they hear is how they comprehend.

DESCRIPTION 1: We can hang on the wall or sit on a desk. We come in many colors and shapes. We don't say much, only ring, hum, or beep, but without us you'd get too much sleep. (Answer: Alarm Clock)

DESCRIPTION 2: Some people look at me and think I'm beautiful while others just shake their heads in puzzlement and walk on by. I've been framed. (Answer: Picture)

DESCRIPTION 3: When I'm served I go "crunch". Often you'll have me as a part of your lunch. I am stored in a cardboard box with wax lining so my freshness will remain. (Answer: Crackers)

DESCRIPTION 4: I'm a shaft of wood with lead showing on my bottom and a soft top that gets rid of mistakes my other end makes. (Answer: Pencil)

DESCRIPTION 5: *If all you want is a date, that's what I'm around for.*
(Answer: Calendar)

DESCRIPTION 6: *I'm all bottled up; I'm smooth and creamy. I smell good too. More women that men use me. When I'm put on no-one can see me.*
(Answer: Lotion)

DESCRIPTION 7: *My sole purpose for existence is to go 'round in circles with a lot of weight on me and pressure in me. I bite the dust often but that alone will seldom deflate me. My greatest fear is that I will be nailed.*
(Answer: Tire)

DESCRIPTION 8: *I'm short and strong, and stand over water on street corners everywhere. How I pray for some feet instead of a foundation of concrete whenever I see a dog anxiously running my way.*
(Answer: Fire Hydrant)

---

4 ➡ "Get the Story Straight"--Read a paragraph out loud to the class, telling them not to take notes on what you are reading. When you have finished reading the paragraph, ask students to write the story on paper as they remember it. Have several students read their versions to the class and compare them to the original story. Point out that each of us goes through a different process of evaluation and remembering what we hear and see. Therefore, people do not comprehend in a like fashion. Another example you can use to illustrate this point is the idea that jury members hear identical testimony but often have difficulty in agreeing on a verdict.

FIELD TRIP

. . .to a travel agency to observe the complete operation and learn more about careers, including the job of travel agent.

. . .to a park or through the town with students from the class acting as tour guides.

(See Field Trip Guide in Appendix for field trip procedures.)

INTERVIEW:

. . .a travel agent

. . .an owner of a travel agency

. . .an employee in any occupation that students are interested in, in the transportation industry.

(See Interview Guide in Appendix for procedures on conducting a group interview.)

ROBIN WELLS' DIALOGUE

(To be read aloud to the class as they take notes on the Trip Planning Form.)

Hi. I'm Robin Wells and you made travel arrangements for my vacation last year. Now I'm ready to go on another vacation, and this year I have decided to go to Puerto Rico and to St. Thomas in the Virgin Islands. I want you to make all my arrangements as usual, so I'll tell you just what I want and you can make notes. O.K.?

The first day of my vacation is Tuesday, July 17, and on the morning of that day I would like to fly from New York City to San Juan, Puerto Rico. I want to stay for three nights at the ElConvento hotel--that's spelled E-L C-O-V-E-N-T-O. My best friend is going to be staying at the ElConvento at the same time I'll be there; otherwise I would just stay at the Hilton.

On the second day, Wednesday the 18th, I would like you to arrange a sightseeing tour of the island for me. Be sure the tour includes the Rain Forest. My friend Larry Parker went to Puerto Rico two years ago and has been talking about the rain forest ever since, and I want to find out if it is as interesting as Larry says, which I don't expect it to be.

I will spend the third day at the beach, but I want you to arrange a night club tour in the evening for me. I have friends who took a night club tour in San Juan last year, and they said it was really great.

On the afternoon of the fourth day, July 20th, I want to fly to St. Thomas in the Virgin Islands for three days and nights. So make a flight reservation for me from San Juan to St. Thomas for July 20th.

While at St. Thomas, I want to stay at the Bluebeard's Castle Hotel. I understand there is only one real town on St. Thomas; is that right? On July 21, I want to visit the Virgin Island National Park on St. Johns Island.

On July 22, I would like you to arrange a shopping tour of St. Thomas and later I will maybe go to the beach. Then on the seventh day, July 23, I want to fly back to New York City on an afternoon flight.

Another thing I forgot to mention, I don't want to pay a fortune for the hotels in Puerto Rico and St. Thomas. Someone told me I could get a single room at those hotels for $23 a day in July, and that is the rate I would like.

Call me when you have made all the arrangements and I will come in to pick up my tickets. My telephone number is 678-2455.

UNIT 15

TEACHER'S KEY

Simulation Page 1

Go over page 1 of the simulation activity with students.

a. Ask students whether they are acquainted with any people who are travel agents.

b. If so, ask whether they think that the travel agents they know really do the types of things described here.

c. Ask students to describe other types of work performed by the travel agents they know, and in what type organization he or she works.

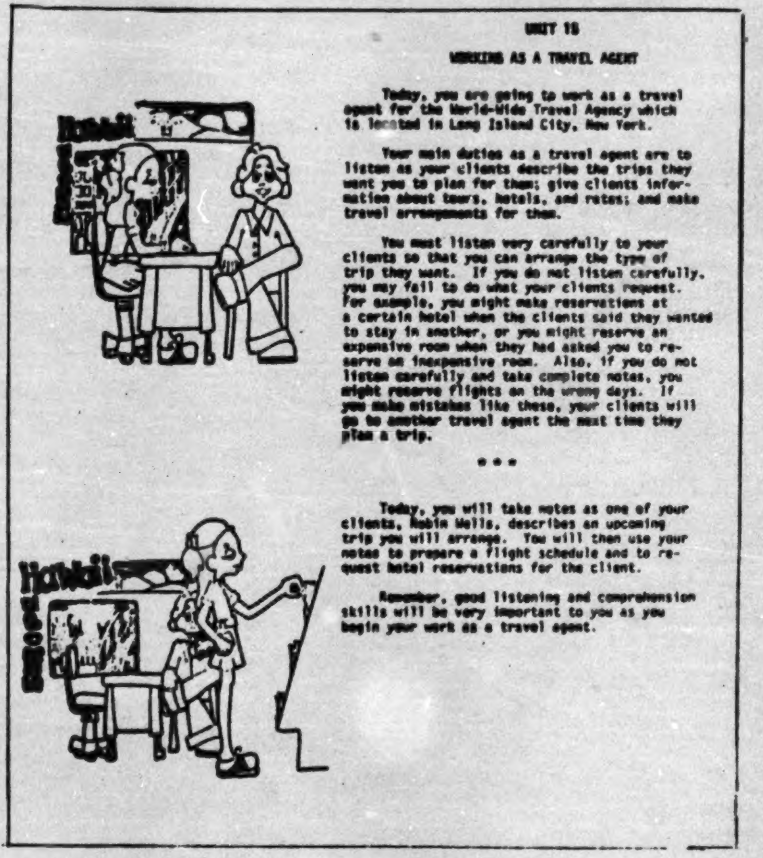
In a discussion develop the idea that travel agents must:

a. Be able to comprehend and follow oral instructions.

b. Have a pleasant manner on the telephone and in person.

c. Be able to work in a hectic atmosphere and under the pressure of deadlines.

d. Be skillful at remembering facts and details.



UNIT 15

WORKING AS A TRAVEL AGENT

Today, you are going to work as a travel agent for the World-Wide Travel Agency which is located in Long Island City, New York.

Your main duties as a travel agent are to listen as your clients describe the trips they want you to plan for them; give clients information about tours, hotels, and rates; and make travel arrangements for them.

You must listen very carefully to your clients so that you can arrange the type of trip they want. If you do not listen carefully, you may fail to do what your clients request. For example, you might make reservations at a certain hotel when the clients said they wanted to stay in another, or you might reserve an expensive room when they had asked you to reserve an inexpensive room. Also, if you do not listen carefully and take complete notes, you might reserve flights on the wrong days. If you make mistakes like these, your clients will go to another travel agent the next time they plan a trip.

* * *

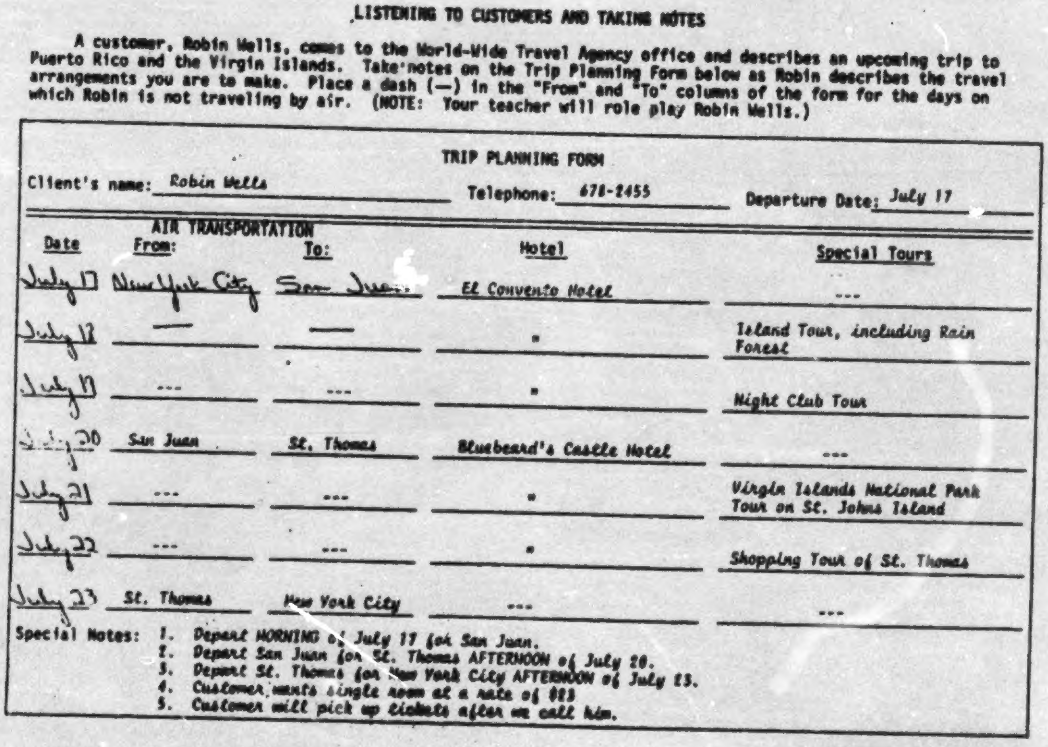
Today, you will take notes as one of your clients, Robin Wells, describes an upcoming trip you will arrange. You will then use your notes to prepare a flight schedule and to request hotel reservations for the client.

Remember, good listening and comprehension skills will be very important to you as you begin your work as a travel agent.

Simulation Page 2

The information given orally to the students is recorded correctly on the completed form shown below.

Ask students if they experienced difficulty in recording all the details and facts that Robin Wells wanted as part of the vacation. Point out that in order to be a travel agent, a person must be able to hear and record a myriad of details accurately.



LISTENING TO CUSTOMERS AND TAKING NOTES

A customer, Robin Wells, comes to the World-Wide Travel Agency office and describes an upcoming trip to Puerto Rico and the Virgin Islands. Take notes on the Trip Planning Form below as Robin describes the travel arrangements you are to make. Place a dash (—) in the "From" and "To" columns of the form for the days on which Robin is not traveling by air. (NOTE: Your teacher will role play Robin Wells.)

TRIP PLANNING FORM

Client's name: *Robin Wells*
Telephone: *678-2455*
Departure Date: *July 17*

Date	AIR TRANSPORTATION From:	To:	Hotel	Special Tours
July 17	New York City	San Juan	*El Convento Hotel*	---
July 18	—	—	"	*Island Tour, including Rain Forest*
July 19	---	---	"	*Night Club Tour*
July 20	*San Juan*	*St. Thomas*	*Bluebeard's Castle Hotel*	---
July 21	---	---	"	*Virgin Islands National Park Tour on St. Johns Island*
July 22	---	---	"	*Shopping Tour of St. Thomas*
July 23	*St. Thomas*	*New York City*	---	---

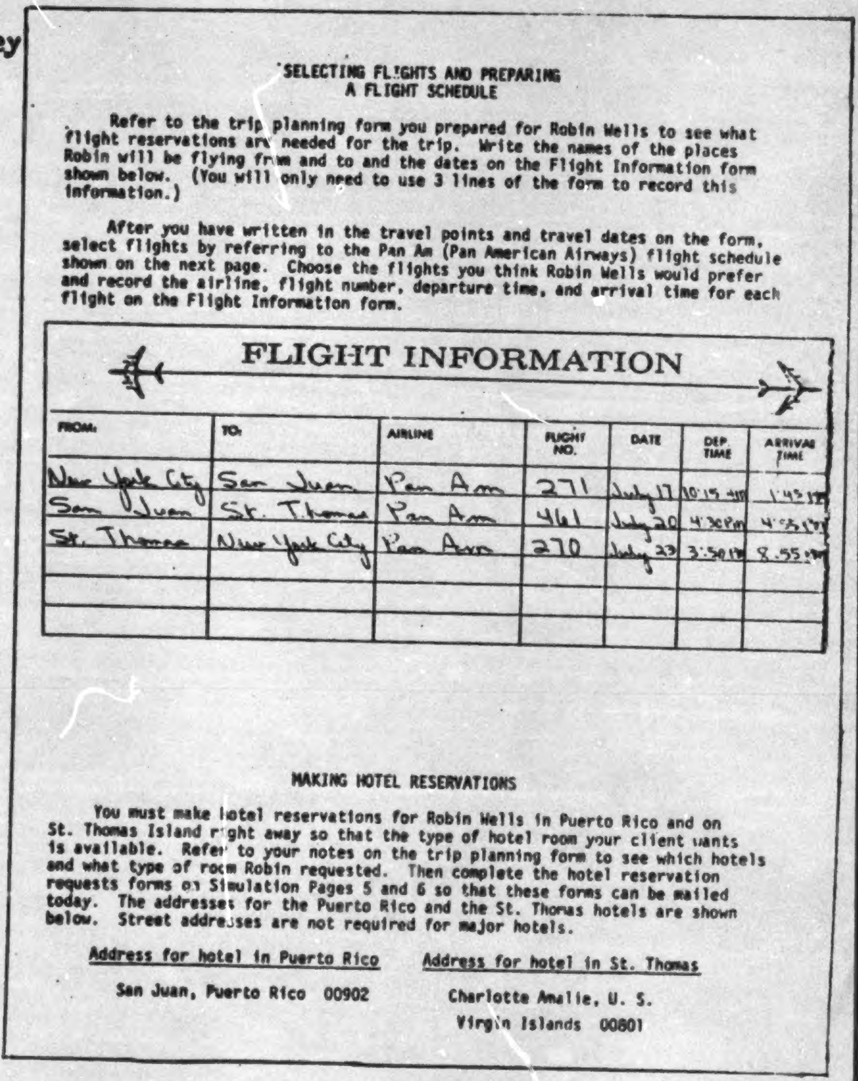
Special Notes:
1. *Depart MORNING of July 17 for San Juan.*
2. *Depart San Juan for St. Thomas AFTERNOON of July 20.*
3. *Depart St. Thomas for New York City AFTERNOON of July 23.*
4. *Customer wants single room at a rate of $23*
5. *Customer will pick up tickets after we call him.*

Simulation Pages 3 and 4

A completed Flight Information form is shown at the right. Notice that flights have been selected according to the preference of the customer and times have been converted from 24-hour to standard times.

Ask students which flights they selected for Robin Wells, and what standard time they list for those flights.

(Note: Instructions for converting to standard time are given near the top of Simulation Page 4. You may want to convert several 24-hour times to standard times before students begin the simulation so they understand the process.)



SELECTING FLIGHTS AND PREPARING A FLIGHT SCHEDULE

Refer to the trip planning form you prepared for Robin Wells to see what flight reservations are needed for the trip. Write the names of the places Robin will be flying from and to and the dates on the Flight Information form shown below. (You will only need to use 3 lines of the form to record this information.)

After you have written in the travel points and travel dates on the form, select flights by referring to the Pan Am (Pan American Airways) flight schedule shown on the next page. Choose the flights you think Robin Wells would prefer and record the airline, flight number, departure time, and arrival time for each flight on the Flight Information form.

FLIGHT INFORMATION

FROM:	TO:	AIRLINE	FLIGHT NO.	DATE	DEP. TIME	ARRIVAL TIME
New York City	San Juan	Pan Am	271	July 17	10:15 am	1:45 pm
San Juan	St. Thomas	Pan Am	461	July 20	4:30 pm	4:55 pm
St. Thomas	New York City	Pan Am	270	July 23	3:50 pm	8:55 pm

MAKING HOTEL RESERVATIONS

You must make hotel reservations for Robin Wells in Puerto Rico and on St. Thomas Island right away so that the type of hotel room your client wants is available. Refer to your notes on the trip planning form to see which hotels and what type of room Robin requested. Then complete the hotel reservation requests forms on Simulation Pages 5 and 6 so that these forms can be mailed today. The addresses for the Puerto Rico and the St. Thomas hotels are shown below. Street addresses are not required for major hotels.

Address for hotel in Puerto Rico	Address for hotel in St. Thomas
San Juan, Puerto Rico 00902	Charlotte Amalie, U. S. Virgin Islands 00801

Optional Discussion Topics

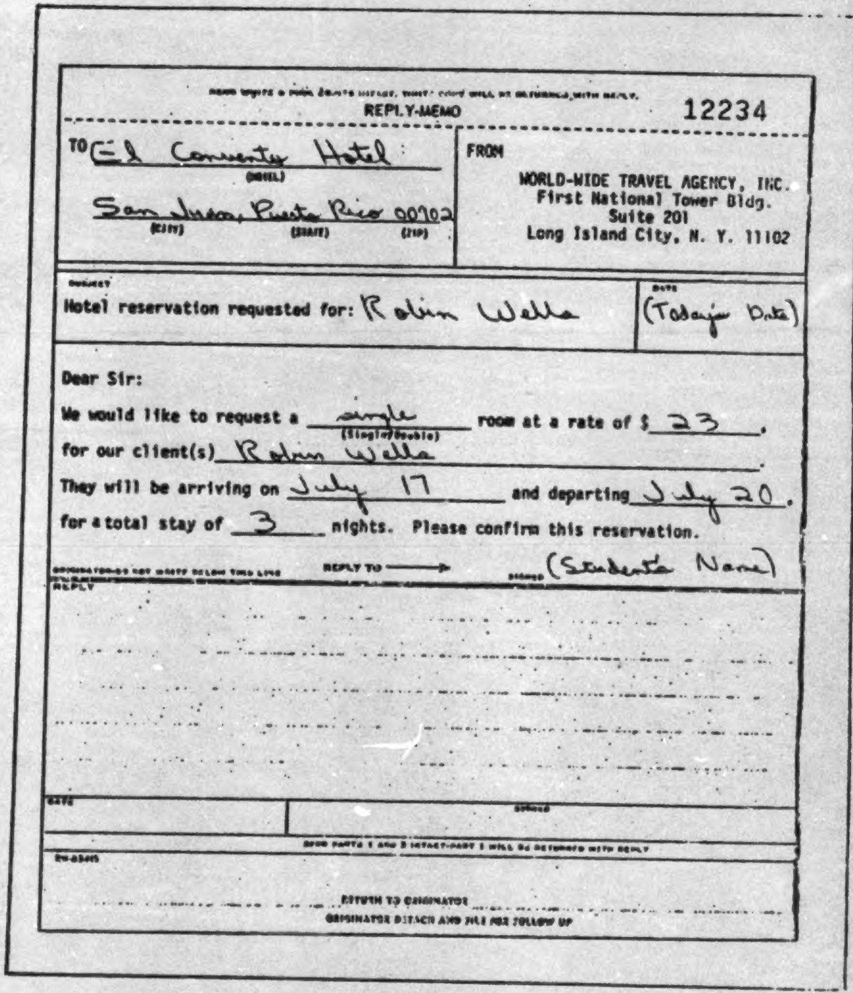
- Ask students why they think an airline would list their flight schedule using the 24-hour clock.
- Ask students if they know of any other agencies who operate on the 24-hour clock.

Simulation Page 5

A correctly completed hotel reservation form is shown at the right.

Optional Discussion Topic

- Ask students if they know what it means to confirm a reservation. Ask them why they think the travel agent asked to have the rooms confirmed.



REPLY-MEMO 12234

TO El Convento Hotel
(HOTEL)
San Juan, Puerto Rico 00902
(CITY) (STATE) (ZIP)

FROM
WORLD-WIDE TRAVEL AGENCY, INC.
First National Tower Bldg.
Suite 201
Long Island City, N. Y. 11102

SUBJECT
Hotel reservation requested for: Robin Wells

DATE
(Today's Date)

Dear Sir:

We would like to request a single (Single/Double) room at a rate of $ 23 , for our client(s) Robin Wells .

They will be arriving on July 17 and departing July 20 , for a total stay of 3 nights. Please confirm this reservation.

ORIGINATOR-DO NOT WRITE BELOW THIS LINE

REPLY TO ⟶

SIGNED (Student's Name)

REPLY

DATE

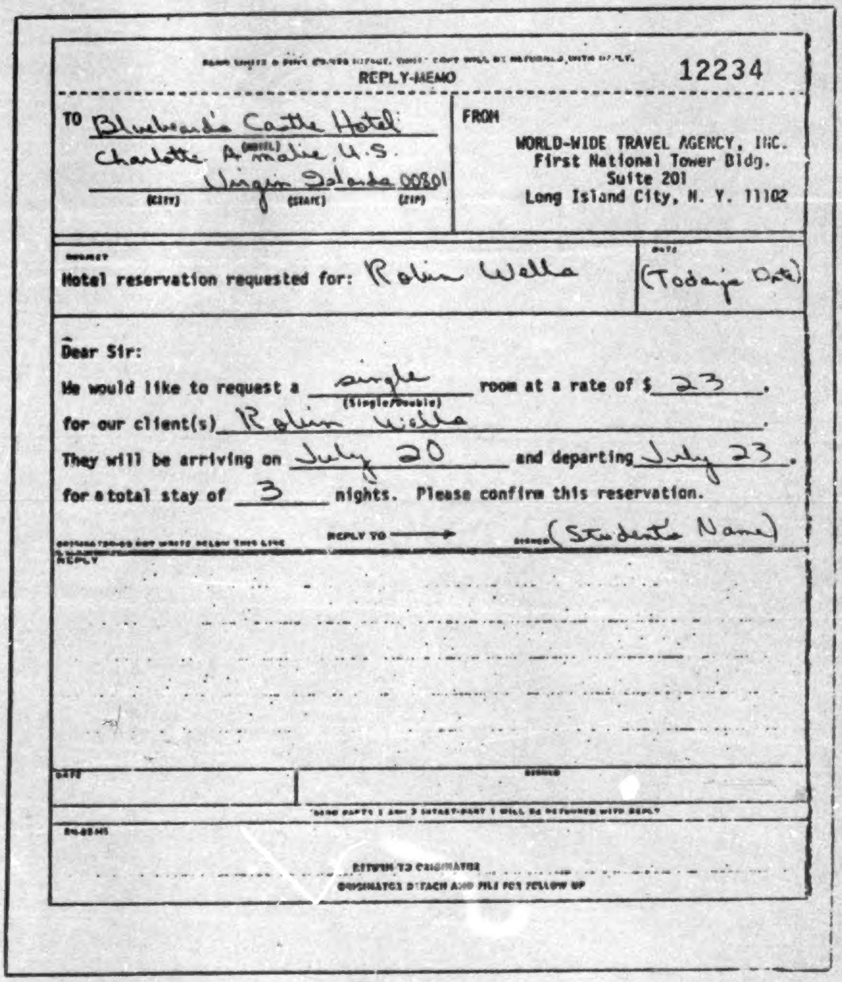
SIGNED

RETURN TO ORIGINATOR

ORIGINATOR DETACH AND FILE FOR FOLLOW UP

Simulation Page 6

A correctly completed hotel reservation form is shown at the right.



REPLY-MEMO 12234

TO Bluebeard's Castle Hotel
(HOTEL)
Charlotte Amalie, U.S.
Virgin Islands 00801
(CITY) (STATE) (ZIP)

FROM
WORLD-WIDE TRAVEL AGENCY, INC.
First National Tower Bldg.
Suite 201
Long Island City, N. Y. 11102

SUBJECT
Hotel reservation requested for: Robin Wells

DATE
(Todays Date)

Dear Sir:

We would like to request a single (Single/Double) room at a rate of $ 23 .

for our client(s) Robin Wells .

They will be arriving on July 20 and departing July 23 .

for a total stay of 3 nights. Please confirm this reservation.

REPLY TO ⟶

SIGNED (Students Name)

REPLY

DATE

SIGNED

RETURN TO ORIGINATOR

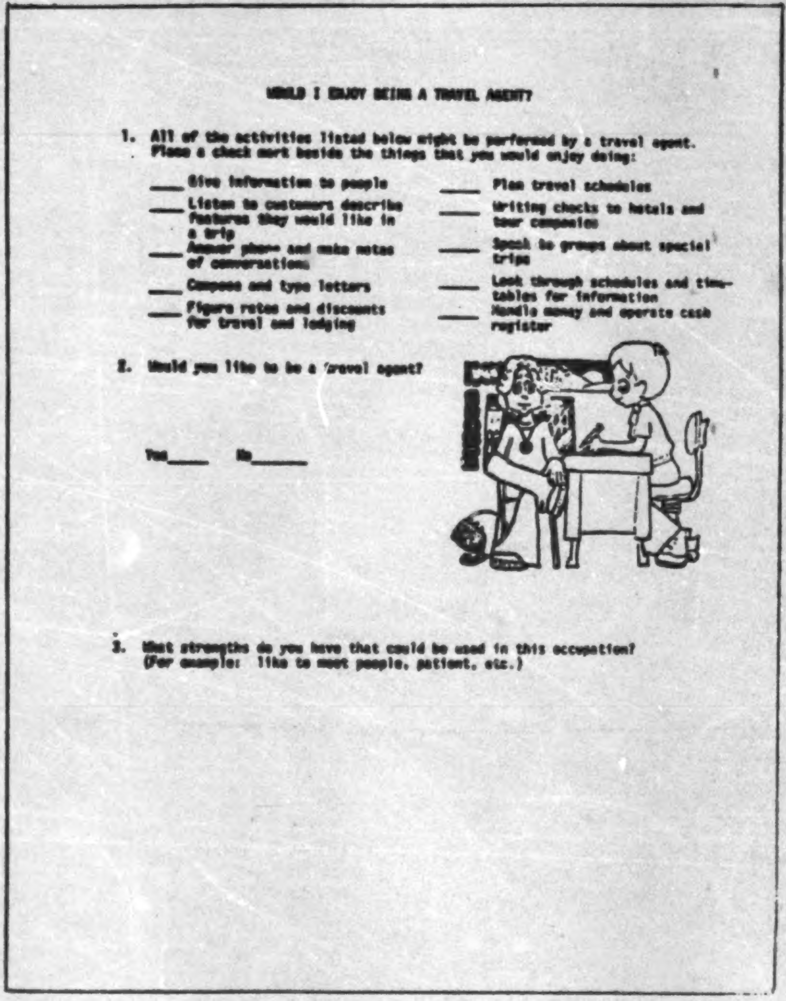
ORIGINATOR DETACH AND FILE FOR FOLLOW UP

Simulation Page 7

The purpose of the questions on page 7 of the simulation is to encourage students to examine their own abilities and personality and compare these to the characteristics needed to succeed in the occupation explored in this unit.

Encourage students to talk about their own likes and dislikes and about the things they think they would like and dislike about this occupation.

Work with the business and office resource teacher to identify resources to which students who are interested in this occupation can go to explore the occupation further. Also, work with the business and office resource teacher to develop additional exploration activities related to this unit.



WOULD I ENJOY BEING A TRAVEL AGENT?

1. All of the activities listed below might be performed by a travel agent. Place a check mark beside the things that you would enjoy doing:

- ____ Give information to people
- ____ Listen to customers describe features they would like in a trip
- ____ Answer phone and make notes of conversations
- ____ Compose and type letters
- ____ Figure rates and discounts for travel and lodging
- ____ Plan travel schedules
- ____ Writing checks to hotels and tour companies
- ____ Speak to groups about special trips
- ____ Look through schedules and time-tables for information
- ____ Handle money and operate cash register

2. Would you like to be a travel agent?

Yes____ No______

3. What strengths do you have that could be used in this occupation? (For example: like to meet people, patient, etc.)

BACKGROUND INFORMATION ON TRAVEL AGENTS

Travel agents provide airline tickets and arrange for lodging and special excursions for customers who come to the agent for travel arrangments. Thus, travel agents work as a liaison between the customer and airlines, hotels, tour companies, and so forth. Because the travel agent performs this liaison function, most of the agent's time is spent communicating with people. For example, after hearing a customer describe the type of trip he or she wants, the travel agent may call an airline to reserve a flight, contact a hotel in Europe to make room reservations, and then call the customer back to confirm the arrangements.

These are some of the services which travel agents provide:

- .Obtains travel and hotel accommodations for customers
- .Issues and validates tickets of airlines, buses, and trains
- .Prepares itineraries (proposed route and plans for a trip)
- .Compiles reports
- .Figures rates and obtains confirmation of travel and lodging
- .Keeps directory of hotels, motels, and timetables
- .Offers descriptive literature (brochures, maps, etc.) of areas to visit, entertainment, and what to see
- .Answers inquiries about routes, fares and accommodations
- .Prepares tours for groups
- .Arranges for motor transportation for arriving and departing travelers
- .Arranges for visas and other documents needed for foreign travel
- .Gives travel presentations to groups interested in tours, or as a promotional aid.

A successful travel agent needs the following skills, capabilities, and education:

SKILLS AND
CAPABILITIES:

- .Good communication skills, both verbal and writing
- .A pleasant manner on the telephone and in person
- .Neat, attractive appearance
- .Ability to listen and understand customer needs
- .Patience and diplomacy
- .Good basic math skills
- .Ability to work under pressure and hectic atmosphere(due to seasonal nature of business and transportation problems)
- .Skill at remembering facts and details

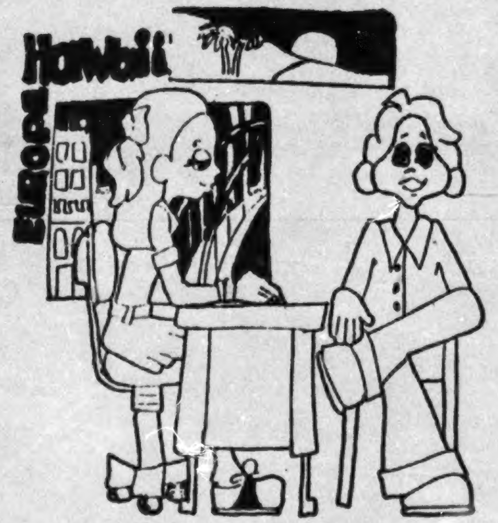
EDUCATION:

- .High school graduate; college training desirable (Helpful courses: geography, business training, and public relations)
- .On-the-job training is main route to becoming a travel agent

Travel agents are usually paid on a salary basis; however, they sometimes receive a commission, in addition to their salary, on all bookings they make. For information about the salary of travel agents in your locale, check the employment want ads in a daily newspaper or contact your state employment agency.

UNIT 15

WORKING AS A TRAVEL AGENT



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Your main duties as a travel agent are to listen as your clients describe the trips they want you to plan for them; give clients information about tours, hotels, and rates; and make travel arrangements for them.

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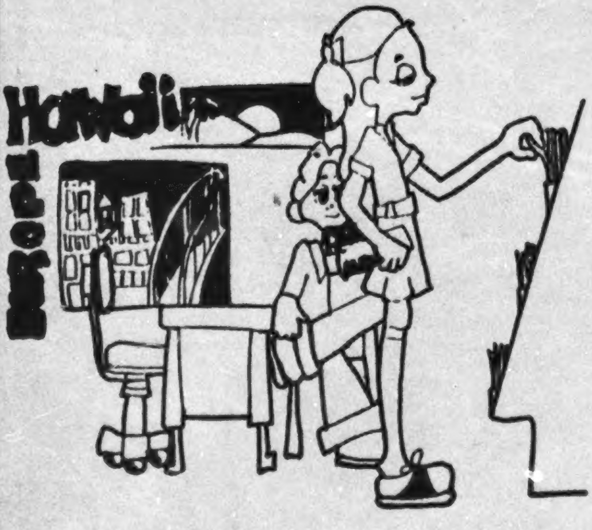
* * *



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Remember, good listening and comprehension skills will be very important to you as you begin your work as a travel agent.

LISTENING TO CUSTOMERS AND TAKING NOTES

A customer, Robin Wells, comes to the World-Wide Travel Agency office and describes an upcoming trip to Puerto Rico and the Virgin Islands. Take notes on the Trip Planning Form below as Robin describes the travel arrangements you are to make. Place a dash (—) in the "From" and "To" columns of the form for the days on which Robin is not traveling by air. (NOTE: Your teacher will role play Robin Wells.)

TRIP PLANNING FORM

Client's name: ____________ Telephone: ____________ Departure Date: ____________

	AIR TRANSPORTATION			
Date	**From:**	**To:**	**Hotel**	**Special Tours**
July 17	New York City	San Juan		
July 18	—	—		
July 19				
July 20				
July 21				
July 22				
July 23				

Special Notes:

SELECTING FLIGHTS AND PREPARING A FLIGHT SCHEDULE

Refer to the trip planning form you prepared for Robin Wells to see what flight reservations are needed for the trip. Write the names of the places Robin will be flying from and to and the dates on the Flight Information form shown below. (You will only need to use 3 lines of the form to record this information.)

After you have written in the travel points and travel dates on the form, select flights by referring to the Pan Am (Pan American Airways) flight schedule shown on the next page. Choose the flights you think Robin Wells would prefer and record the airline, flight number, departure time, and arrival time for each flight on the Flight Information form.

FLIGHT INFORMATION

FROM:	TO:	AIRLINE	FLIGHT NO.	DATE	DEP. TIME	ARRIVAL TIME

MAKING HOTEL RESERVATIONS

You must make hotel reservations for Robin Wells in Puerto Rico and on St. Thomas Island right away so that the type of hotel room your client wants is available. Refer to your notes on the trip planning form to see which hotels and what type of room Robin requested. Then complete the hotel reservation requests forms on Simulation Pages 5 and 6 so that these forms can be mailed today. The addresses for the Puerto Rico and the St. Thomas hotels are shown below. Street addresses are not required for major hotels.

Address for hotel in Puerto Rico

San Juan, Puerto Rico 00902

Address for hotel in St. Thomas

Charlotte Amalie, U. S.
Virgin Islands 00801

PAN AM TIMETABLE

To find desired service—the schedules are shown in Quick Reference form alphabetically. Go to the City that your trip originates from—then all destinations are listed alphabetically.

The Quick Reference listing gives the frequency of service, time of departure and arrival, the flight number, connection city (if any), type of aircraft and class of service.

Classes of Service: F—First Class; Y—Economy Class; K—Thrift Class; N—Night.

The 24-Hour Clock Is Used In This Time Table →

Times shown between 0:01 (1 minute after midnight) and 12:00 (noon) are A.M. times. Times shown from 12:01 to 24:00 are P.M. times. To convert P.M. times to 12-hour clock, subtract 12 hours.

	Frequency	Leave	Arrive	Flight No.	Stops	Connecting City	Aircraft	Class
FROM **NEW YORK** TO:								
ROME	Th	1750	1305+1	148	4		707	FY
	Daily	2000	0810+1	110	0		707	FY
	Daily	2045	1235+1	114	1		747	FY
ST. CROIX	WeTh	0830	1250	261	1		727	FY
	Daily	1150	1910	265	1		727	FY
ST. THOMAS	WeTh	0830	1156	261	0		727	FY
	Daily	1150	1515	265	0		727	FY
SAN JOSE	SuWe	1125	1825	541	2		707	FY
	MoThFrSa	1300	1825	541	1		707	FY
SAN JUAN	Daily	0700	1220	213	1		747	FK
	Daily	1015	1345	271	0		747	FK
	SuSa	1230	1600	293	0		747	FK
	MoTuFr	1230	1600	293	0		707	FK
	Daily	2330	0300+1	299	0		707	FNKN
SAN SALVADOR	SuWe	1125	1745	541/503	2	GUATEMALA CITY	707	FY
	MoThFrSa	1300	1745	541/503	1	GUATEMALA CITY	707	FY
SANTO DOMINGO	SuFrSa	0800	1130	233	0		747	FY
	MoTuWeTh	0800	1130	233	0		707	FY

FROM **SAN JUAN** TO:								
PANAMA CITY	Tu	0800	2010	458/585	1	MIAMI	727/707	FY
	Tu	1200	2305	452/503	5	MIAMI	707	FY
	SuMoFrSa	1515	2010	462/585	1	MIAMI	727/707	FY
PHILADELPHIA	WeTh	1730	2110	214	0		747	FK
POINTE A PITRE	We	1355	1455	241	0		707	FK
PORT AU PRINCE	Daily	0730	0835	436	1		707	FY
PORT OF SPAIN	SuTh	1445	1615	271	0		727	FY
	SuTh	1455	1750	489	1		727	FY
RIO DE JANEIRO	Su	1355	0105+1	241/443	1	CARACAS	707	FY
	Fr	1355	0910+1	241/515	2	CARACAS	707	FY
ROME	SuWe	1840	1150+1	254	2		707	FY
ST. CROIX	Daily	1630	1750	481	1		727	FY
ST. THOMAS	Daily	1630	1655	481	0		727	FY
SANTO DOMINGO	Daily	0730	0720	436	0		707	FY
SAO PAULO	Su	1355	0305+1	241/443	2	CARACAS	707	FY
	Fr	1355	0720+1	241/515	1	CARACAS	707	FY
VIENNA	TuSa	1345	1115+1	292/92	3	NEW YORK	747/707	FY
WASHINGTON	Su	1800	0030+1	256/444	1	MIAMI	727/707	FY

FROM **ST. THOMAS** (GMT −4) (Harry Truman Field) To:								
MIAMI	Daily	1230	1740	462	2		727	FY
NEW YORK	Daily	1550	2055	270	1		727	FY
	Daily	1730	2225	262	1		727	FY
ST. CROIX	Daily	1230	1250	462	0		727	FY
	Daily	1550	1610	270	0		727	FY
	Daily	1730	1750	262	0		727	FY

SEND WHITE & PINK COPIES INTACT, WHITE COPY WILL BE RETURNED WITH REPLY.

REPLY-MEMO

12234

TO ______________________________
(HOTEL)

____
(CITY) (STATE) (ZIP)

FROM

WORLD-WIDE TRAVEL AGENCY, INC.
First National Tower Bldg.
Suite 201
Long Island City, N. Y. 11102

SUBJECT

Hotel reservation requested for:

DATE

Dear Sir:

We would like to request a ______________ (Single/Double) room at a rate of $__________,
for our client(s)____.
They will be arriving on ________________ and departing ______________,
for a total stay of ________ nights. Please confirm this reservation.

ORIGINATOR-DO NOT WRITE BELOW THIS LINE REPLY TO ⟶ SIGNED

REPLY

DATE

SIGNED

SEND PARTS 1 AND 3 INTACT-PART 1 WILL BE RETURNED WITH REPLY

REMARKS

RETURN TO ORIGINATOR

ORIGINATOR DETACH AND FILE FOR FOLLOW UP

SEND WHITE & PINK COPIES INTACT. WHITE COPY WILL BE RETURNED WITH REPLY.

REPLY-MEMO

12234

TO ______________________________
(HOTEL)

____
(CITY) (STATE) (ZIP)

FROM

WORLD-WIDE TRAVEL AGENCY, INC.
First National Tower Bldg.
Suite 201
Long Island City, N. Y. 11102

SUBJECT

Hotel reservation requested for:

DATE

Dear Sir:

We would like to request a ______________ (Single/Double) room at a rate of $__________,

for our client(s)____.

They will be arriving on ____________________ and departing________________,

for a total stay of _________ nights. Please confirm this reservation.

ORIGINATOR-DO NOT WRITE BELOW THIS LINE   REPLY TO ——→   SIGNED

REPLY

____

____

____

____

____

DATE   SIGNED

SEND PARTS 1 AND 3 INTACT-PART 1 WILL BE RETURNED WITH REPLY

RM-83-NS

RETURN TO ORIGINATOR

ORIGINATOR DETACH AND FILE FOR FOLLOW UP

WOULD I ENJOY BEING A TRAVEL AGENT?

1. All of the activities listed below might be performed by a travel agent. Place a check mark beside the things that you would enjoy doing:

____ Give information to people

____ Listen to customers describe features they would like in a trip

____ Answer phone and make notes of conversations

____ Compose and type letters

____ Figure rates and discounts for travel and lodging

____ Plan travel schedules

____ Writing checks to hotels and tour companies

____ Speak to groups about special trips

____ Look through schedules and timetables for information

____ Handle money and operate cash register

2. Would you like to be a travel agent?

Yes_____ No_______

3. What strengths do you have that could be used in this occupation? (For example: like to meet people, patient, etc.)